

2942  
Texas state  
~~Afton Chemical Corporation~~



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 10/28/2008

Dear **Dwayne Tamayo**

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** HOU-2942

**Expiration Date** 10/28/2010

**Generator:** Texas Sterling Construction (Jasmine)

**Address:** 1307 Jasmine  
Webster, TX 77598

### Waste Information

**Name of Waste:** Non-hazardous concrete cure and water

**TCEQ Waste Code #:** CESQ6031

**Container Type:**

**Detailed Description of Process Generating Waste:**

Excess material from construction

**Color:** grey to white

**Odor:** none

**pH:** 4-10

**Physical State:**

**Incompatibilities:** strong oxidizers

**Safety Related Data/Special Handling:**

level d ppe

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000462

Need MSDS - then OK  
SRP

Waste case 2

DB



☒ CES Environmental Services – Houston Facility  
4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☐ CES Environmental Services – Port Arthur Facility  
2420 S. Gulfway Drive, Port Arthur, TX 77641  
Phone: (713) 676-1460 Fax: (713) 676-1676  
U.S. EPA ID No: TXR000079307 ISWR No: 88585

**SECTION 1: Material Producer Information**

Company: Texas Sterling Construction  
Address: 1307 Jasmine  
City, State, Zip: Webster, TX 77598  
Contact: Dwayne Tamayo Title: Supervisor  
Phone No: 281-330-7007 Fax No: 281-821-2995  
24/hr Phone: 281-330-7007  
U.S. EPA I.D. No: TXCESQG  
State I.D. CESQG SIC Code:

**SECTION 2: Billing Information – ☐ Same as Above**

Company: Texas Sterling Construction  
Address: 20800 Fernbush  
City, State, Zip: Houston, TX 77073  
Contact: Dwayne Tamayo Title: Supervisor  
Phone No: 281-330-7007 Fax No: 281-821-2995

**SECTION 3: General Description of the Material / Product**

Name of Material / Product: Non-Hazardous concrete cure and water

Detailed Description of Process Generating or Producing the Material / Product: Excess material from construction

Physical State: ☒ Liquid ☒ Sludge ☐ Powder  
☒ Solid ☐ Filter Cake ☐ Combination

Color: grey to white

Odor: none

Specific Gravity (water=1): 1.12 Density: 8.3-9 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☐ Single-phase ☒ Multi-phase

Container Type: ☒ Drum ☒ Tote ☐ Truck ☐ Other (explain)  
Container Size: 55 Gal 275

Frequency: ☐ Weekly ☒ Monthly ☐ Quarterly ☐ Yearly

Number of Units (containers): 14 dms and totes Other: \_\_\_\_\_

Proper U.S. DOT Shipping Name: CES 6031 Non-RCRA, Non DOT Regulated Waste Concrete Cure

Class: NA UN/NA: NA PG: NA RQ: NA

Flash Point >200	pH 4-10	N/A	N/A	Solids %
Oil & Grease NAmg/l	TOC NAmg/l	Zinc NAmg/l	Copper NAmg/l	Nickel NAmg/l

#### SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	Concentration	Units
The material / product consists of the following materials	Ranges are acceptable	or %
Concrete Cure	5-50	%
Water	50-100	%
Non-Flammable Oils	0-20	%

#### SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.  
Level D PPE

#### SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.  
MSDS

#### SECTION 7: Incompatibilities

Please list all incompatibilities (if any):  
Oxidizers

#### SECTION 8: Material Producer's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: A. Dwayne Tamayo Date: 10-27-08

Printed Name/Title: A. DWAYNE TAMAYO / PROJECT COORDINATOR

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: <u>[Signature]</u>	
Date: <u>10-28-2008</u>	<input checked="" type="radio"/> Approved <input type="radio"/> Rejected
Approval Number: <u>2942</u>	



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

1. **Base Pricing (including freight):**

\$70/dm  
\$200/tote

2. **Contamination Limits (maximum limit before surcharges apply):**

Flashes or non conforming

3. **Surcharge Pricing:**

None

4. **Special Testing Requirements:**

Flash and visual 1 pH

5. **Treatment and Handling Protocol:**

Class 1 sludge

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☐ Subcategory B

☐ Subcategory C

7. **Tests for Product Recovered/Recycled (if applicable):**

NA

8. **Management for Product Recovered/Recycled (if applicable):**

NA

147

3 dms

# **Material Safety Data Sheet** acc. to ISO/DIS 11014

Printing date 07/22/2003

Reviewed on 07/22/2003

## **1 Identification of substance**

- **Product details**
- **Trade name:** Shepler's Cure 309 Rez-All
- **Article number:** 83-306493
- **Application of the substance / the preparation**
- **Manufacturer/Supplier:**  
Shepler's  
9103 E. Alameda Road  
Houston, TX 77054  
(713) 799-1150
- **Information department:** Environmental, Health, and Safety department.

NH  
CES

## **2 Composition/Data on components**

- **Chemical characterization**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

### **Dangerous components:**

8052-41-3	Stoddard solvent	10.656%
61790-12-3	Distilled Tall Oil Fatty Acids	1.28%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

## **3 Hazards identification**

- **Hazard description:**  
Toxic
- **Information pertaining to particular dangers for man and environment:**  
The product has to be labelled due to internationally acknowledged calculation on procedures using the latest valid versions.  
May cause cancer.  
May cause sensitisation by skin contact.  
Harmful: may cause lung damage if swallowed.
- **Classification system:**  
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- **NFPA ratings (scale 0 - 4)**


 Health = 0  
 Fire = 0  
 Reactivity = 0

### **HMTS-ratings (scale 0 - 4)**


 Health = 0  
 Fire = 0  
 Reactivity = 0

**Material Safety Data Sheet**  
**acc. to ISO/DIS 11014**

Printing date 07/22/2003

Reviewed on 07/22/2003

Trade name: Shepler's Cure 309 Rez-All

(Contd. of page 1)

**4 First aid measures**

- **After inhalation:**  
Supply fresh air and to be sure call for a doctor.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**  
Immediately wash with water and soap and rinse thoroughly.  
If skin irritation continues, consult a doctor.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. Then consult a doctor.  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.

**5 Fire fighting measures**

- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:**  
Because fire may produce thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.

**6 Accidental release measures**

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:**  
Do not allow product to reach sewage system or any water course.  
Inform respective authorities in case of seepage into water course or sewage system.  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.

**7 Handling and storage**

- **Handling:**  
• **Information for safe handling:** Open and handle receptacle with care.  
• **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **Storage:**  
• **Requirements to be met by storerooms and receptacles:** No special requirements.  
• **Information about storage in one common storage facility:** Not required.  
• **Further information about storage conditions:** None.

**8 Exposure controls and personal protection**

- **Additional information about design of technical systems:** No further data; see item 7.

(Contd. on page 3)

USA

# Material Safety Data Sheet acc. to ISO/DIS 11014

Printing date 07/22/2003

Reviewed on 07/22/2003

Trade name: Shepler's Cure 309 Rez-All

(Contd. of page 2)

## Components with limit values that require monitoring at the workplace:

### 8052-41-3 Stoddard solvent

PEL 2900 mg/m<sup>3</sup>, 500 ppmREL Short-term value: C 1800\* mg/m<sup>3</sup>Long-term value: 350 mg/m<sup>3</sup>

\*15-min

TLV 325 mg/m<sup>3</sup>, 100 ppm

Additional information: The lists that were valid during the creation were used as basis.

### Personal protective equipment:

#### General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

#### Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

#### Protection of hands:



#### Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests, no recommendation to the glove material can be given for the product.

Select the glove material upon consideration of the penetration times, rates of diffusion and the degradation.

#### Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

#### Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

#### Eye protection:



#### Tightly sealed goggles

## 9 Physical and chemical properties

### General Information

Form:	Fluid
Color:	According to product specification
Odor:	Characteristic

### Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 100°C (212°F)

(Contd. on page 4)

USA

# **Material Safety Data Sheet**

acc. to ISO/DIS 11014

Printing date 07/22/2003

Reviewed on 07/22/2003

Trade name: Shepler's Cure 309 Rez-All

(Contd. of page 3)

· Flash point:	Not applicable.
· Ignition temperature:	230.0°C (446°F)
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	1.1 Vol %
Upper:	6.0 Vol %
· Vapor pressure at 20°C (68°F):	23.0 hPa (17 mm Hg)
· Density at 20°C (68°F):	0.986 g/cm³
· Solubility in / Miscibility with	
Water:	Fully miscible.
· Solvent content:	
Organic solvents:	0.8 %
Water:	71.1 %
· Solids content:	16.1 %

## **10 Stability and reactivity**

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Dangerous reactions: No dangerous reactions known.
- Dangerous products of decomposition: No dangerous decomposition products known.

## **11 Toxicological information**

- Acute toxicity:
- Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- Sensitization: Sensitization possible through skin contact.
- Additional toxicological information:  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Irritant  
Carcinogenic.

## **12 Ecological information**

- General notes:  
Water hazard class 3 (Self-assessment): extremely hazardous for water  
Do not allow product to reach ground water, water course or sewage system, even in small quantities.  
Danger to drinking water if even extremely small quantities leak into the ground.

DBA

(Contd. on page 5)

# **Material Safety Data Sheet** acc. to ISO/DIS 11014

Printing date 07/22/2003

Reviewed on 07/22/2003

Trade name: Shepler's Cure 309 Rez-All

(Contd. of page 4)

## **13 Disposal considerations**

- **Product:**
- **Recommendation:** Must not be disposed of as normal garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to Federal, State, and Local regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

## **14 Transport information**

- **DOT regulations:**
- **Hazard class:** -
- **Limited Quantity Exemption:** No Limited Quantity exemption applies for this shipping class.
- **U.S. Domestic Ground Shipments:** Same as listed for Standard Shipments above.
- **U.S. Domestic Ground Non-Bulk (119 gal or less per container) Shipments:** Same as listed for Standard Shipments above.
- **Land transport ADR/RID (cross-border):**
- **ADR/RID class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

## **15 Regulations**

- **Sara**
- **Section 355 (extremely hazardous substances):**
- 107-15-3 ethylenediamine
- **Section 313 (Specific toxic chemical listings):**
- This product may contain 1 or more toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR part 372. If so, the chemicals are listed below.
- None of the ingredients is listed.
- **TSCA (Toxic Substances Control Act):**
- All ingredients are listed.
- **Proposition 65**
- **Chemicals known to the State of California (Prop. 65) to cause cancer:**
- None of the ingredients is listed.
- **Chemicals known to the State of California (Prop. 65) to cause reproductive toxicity:**
- None of the ingredients is listed.

(Contd. on page 6)

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# **Material Safety Data Sheet** acc. to ISO/DIS 11014

Printing date 07/22/2003

Reviewed on 07/22/2003

Trade name: Shepler's Cure 309 Rez-All

(Contd. of page 5)

**• Cancerogenity categories**

<b>• EPA (Environmental Protection Agency)</b>		
107-15-3	ethylenediamine	D
<b>• IARC (International Agency for Research on Cancer)</b>		
110-91-8	morpholine	3
<b>• NTP (National Toxicology Program)</b>		
None of the ingredients is listed.		
<b>• TLV (Threshold Limit Value established by ACGIH)</b>		
110-91-8	morpholine	A4
107-15-3	ethylenediamine	A4
<b>• MAK (German Maximum Workplace Concentration)</b>		
None of the ingredients is listed.		
<b>• NIOSH-Ca (National Institute for Occupational Safety and Health)</b>		
None of the ingredients is listed.		
<b>• OSHA-Ca (Occupational Safety &amp; Health Administration)</b>		
None of the ingredients is listed.		

**• Product related hazard informations:**

The product has been classified and marked in accordance with directives on hazardous materials.

**• Hazard symbols:**

Toxic

**• Hazard-determining components of labelling:**

Stoddard solvent

Distilled Tall Oil Fatty Acids

**• Risk phrases:**

May cause cancer.

May cause sensitisation by skin contact.

Harmful; may cause lung damage if swallowed.

**• Safety phrases:**

Avoid exposure - obtain special instructions before use.

Keep out of the reach of children.

Keep away from food, drink and animal feedingstuffs.

When using do not eat or drink.

Avoid contact with skin and eyes.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

After contact with skin, wash immediately with plenty of soap and water.

Do not empty into drains.

Wear suitable gloves and eye/face protection.

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**• National regulations:**

**• Water hazard class:** Water hazard class 3 (Self-assessment): extremely hazardous for water.

(Contd. on page 7)

**Material Safety Data Sheet**  
**acc. to ISO/DIS 11014**

Printing date 07/22/2003

Reviewed on 07/22/2003

Trade name: Shepler's Cure 309 Res-All

(Contd. of page 6)

**16 Other information**

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

• Department issuing MSDS: Environmental, Health and Safety department

• Contact: Matthew Paquette

USA

2941

Afton Chemical Corporation



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Material / Product Approval Letter

Date 8/21/2008

Dear Ed Cox

Thank you for choosing CES Environmental Services, Inc. for your material / product recycling needs. The following material has been approved at our facility in Houston, TX. If the material received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # 2941

Expiration Date 8/21/2010

Producer: Afton Chemical Corporation

Address:

Suget, IL 62201

### Material / Product Information

Name of Material / Product hitec 387 performance additive

Container Type:

### Detailed Description of Process Generating or Producing the Material / Product:

out of date product

Color: amber

Odor: slight pungent

pH: neutral

Physical State:

Incompatibilities: strong oxidizers

Safety Related Data/Special Handling:

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.



**CES Environmental  
Services, Inc.**

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
http://www.cesenvironmental.com

TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

JB

**SECTION 1: Material Producer Information**

Company: Afton Chemical Corporation  
Address: 501 Monsanto Avenue  
City, State, Zip: Suget, IL 66201  
Contact: Ed Cox Title:  
Phone No: (618) 583-1078 Fax No: (618) 583-1388  
24/hr Phone: (618) 583-1078  
U.S. EPA I.D. No: na  
State I.D. na SIC Code: na

**SECTION 2: Billing Information - ☒ Same as Above**

Company:  
Address:  
City, State, Zip:  
Contact: Title:  
Phone No: Fax No:

**SECTION 3: General Description of the Material / Product**

Name of Material / Product: Nitec 387 Performance Additive  
Detailed Description of Process Generating or Producing the Material / Product: \_\_\_\_\_

Out of Date Product

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: Amber Odor: Slight Pungent

Specific Gravity (water=1): 0.964 Density: 8 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)  
Container Size: 55 gal

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☒ Yearly

Number of Units (containers): 17

Other: Product

Proper U.S. DOT Shipping Name: Combustible Liquids, N.O.S., (Sulfurized olefins) Petroleum distillates

Class: 3 UN/NA: NA1993 PG: III RQ: 1000 lbs

Flash Point <u>&gt;140</u>	pH <u>Neutral</u>	N/A	N/A	Solids <u>1</u> %
Oil & Grease <u>4.5</u> mg/l	TOC <u>4.5</u> mg/l	Zinc <u>0</u> mg/l	Copper <u>0</u> mg/l	Nickel <u>0</u> mg/l

#### SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	Concentration	Units
The material / product consists of the following materials	Ranges are acceptable	or %
HITEC 387 Performance Additive (See MSDS)	100	%

#### SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.  
Standard

#### SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.  
HITEC 387 MSDS

#### SECTION 7: Incompatibilities

Please list all incompatibilities (if any):  
Strong Oxidizers

#### SECTION 8: Material Producer's Certification

The information contained herein is based on ☐ generator knowledge and/or ☒ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name/Title: \_\_\_\_\_

<p>CES USE ONLY (DO NOT WRITE IN THIS SPACE)</p> <p>Technical Manager: <u>[Signature]</u></p> <p>Date: <u>8-21-08</u>      Approved      Rejected</p> <p>Approval Number: <u>2941</u></p>	
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PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. Base Pricing (including freight):

If brought in By CES on PCI back haul: no charge/  
no payment.  
If brought in by outside transporter at customer expense:  
pay \$0.15/gal

2. Contamination Limits (maximum limit before surcharges apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

Record quantity in each drum. Number each drum  
and record amount and product type on inventory  
list.

5. Treatment and Handling Protocol:

Once inventory has been given to product sales,  
the material will be resold as is, ~~according to~~  
directed by product sales person.

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A      ☐ Subcategory B      ☐ Subcategory C

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

7. Tests for Product Recovered/Recycled (if applicable):

*See Special testing requirements.*

8. Management for Product Recovered/Recycled (if applicable):

*See treatment & handling protocol*



HiTEC 387 Performance Additive

# Material Safety Data Sheet

MSDS No. H387

HiTEC is a trademark owned by Afton Chemical Corporation or one of its subsidiaries.

## 1. Product and Company Identification

**Chemical Family** Petrochemical.  
**Product Use** Petrochemical industry: Gear oil additive  
**CAS No.** Mixture.  
**Validation Date** 3 June 2004  
**In Case of Emergency**  
1-800-403-0044 (US & Canada)  
1-804-648-7727 (International)  
32-2-507-20-64 (Europe)

**Manufacturer / Supplier**

Afton Chemical Corporation  
500 Spring St.  
Richmond, VA 23219  
1-804-788-5800

Afton Chemical Limited  
Euro-Tech Centre  
London Road, Bracknell, Berkshire  
RG12 2UW, England  
44 1344-304141

## 2. Composition and Information on Ingredients

Note: See section 8 for occupational exposure limits and section 11 for LC50/LD50 information.

Substance/Preparation : Preparation

<u>Ingredient Name</u>	<u>CAS No.</u>	<u>Conc. (% w/w)</u>	<u>EU Classification</u>	<u>WHMIS Regulated?</u>
Mineral Oil	Mixture.	30-60	Not controlled under DSD (Europe).	No.

## 3. Hazards Identification

**Notice to Reader**

Afton operates a world-wide system for hazard communication. Some hazards shown in Section 3 may apply to non-EU countries and may not result in classification and labeling in the EU. Please see Section 2 and 15 for country specific classification information, and Section 11 for additional details.

The preparation is not classified as dangerous according to Directive 1999/45/EC and its amendments.

**Primary Hazards and Critical Effects** : WARNING!  
COMBUSTIBLE LIQUID AND VAPOR.  
VAPOR MAY CAUSE FLASH FIRE.  
**Physical/Chemical Hazards** : Combustible.  
**Environmental Hazards** : Not classified as dangerous for the environment according to EC criteria.

**Hazardous Material  
Information System  
(U.S.A.)**

Health	0
Reactivity	0

## 4. First Aid Measures

**Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.  
**Ingestion** : If affected person is fully conscious, give one glass of water to drink. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.  
**Skin Contact** : Wash with soap and water. Get medical attention if irritation occurs.  
**Eye Contact** : Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention immediately.

EPAHO106000480

## 5. Fire-Fighting Measures

- Extinguishing Media** : In case of fire, use water spray (fog), foam, dry chemicals, or CO<sub>2</sub>.
- Fire-Fighting Procedures** : Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.
- Fire/Explosion Hazards** : Combustible liquid and vapor. Vapor may cause fire.
- Hazardous Decomposition Products** : These products are carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO, NO<sub>2</sub>...), sulfur oxides (SO<sub>2</sub>, SO<sub>3</sub>...).
- Flash point** : Closed cup: 85°C (185°F). (Pensky-Martens. Minimum)

## 6. Accidental Release Measures

- Personal Precautions** : Immediately contact emergency personnel. Eliminate all ignition sources. Keep unnecessary personnel away. Use suitable protective equipment (Section 8). Follow all fire fighting procedures (Section 5). Do not touch or walk through spilled material.
- Environmental Precautions and Clean-up Methods** : If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) and use a non-sparking or explosion proof means to transfer material to a sealed, appropriate container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Minimize contact of spilled material with soils to prevent runoff to surface waterways.

Note: See section 1 for emergency contact information and section 13 for waste disposal.

## 7. Handling and Storage

- Handling** : Keep away from heat, sparks and flame. Avoid prolonged or repeated contact with skin. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. To avoid fire, minimize ignition sources.
- Storage** : Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Keep container in a well-ventilated place.

## 8. Exposure Controls and Personal Protection

- Engineering Controls** : Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

### Personal Protective Equipment

- Respiratory System** : Use appropriate respiratory protection if there is the potential to exceed the exposure limit(s).
- Skin and Body** : Disposable outer garments when there is the potential for contact with the material.
- Hands** : Use chemical resistant, impervious gloves.
- Eyes** : Safety glasses with side shields. Goggles with a face shield may be necessary depending on quantity of material and conditions of use.

### Occupational Exposure Limits

<u>Ingredient Name</u>	<u>OEL United States</u>	<u>OEL Canada</u>	<u>OEL Europe</u>
Mineral Oil	<b>ACGIH (United States).</b> TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup> <b>OSHA (United States).</b> TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>	<b>EH40 (UK) (Europe, 2002).</b> TWA: 5 mg/m <sup>3</sup> 8 hour(s).

## 9. Physical and Chemical Properties

- Physical State and Appearance** : Liquid. (Clear.)
- Color** : Amber. (Light.)
- Odor** : Pungent. (Slight.)
- Specific Gravity** : 0.964 at 15.6/15.6°C (target).
- Solubility** : Insoluble in cold water.
- Viscosity** : 7.17cSt at 100°C (target).
- Flash Point** : Closed cup: 85°C (185°F). (Pensky-Martens. Minimum)

## 10. Stability and Reactivity

Stability : The product is stable.  
 Materials to avoid : Strong oxidizing and reducing agents.  
 Conditions to avoid : High temperatures, sparks, and open flames.

## 11. Toxicological Information

Routes of Entry : None known.  
 Target Organs : None known.  
 Acute Effects  
     Inhalation : Inhalation of oil mist or vapors at elevated temperatures may cause respiratory irritation.  
     Ingestion : Not determined.  
     Skin Contact : Non-irritating to the skin.  
     Eye Contact : Non-irritating to the eyes.  
 Chronic Effects  
     Adverse Effects : Not determined.  
     Carcinogenic Effects : Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

### Toxicity Data

<u>Ingredient Name</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
Not determined.				

Other Information : Not available.

## 12. Ecological Information

Environmental Hazards : Not classified as dangerous for the environment according to EC criteria. Based on calculation.  
 Environmental Fate : This product contains components which may be persistent in the environment.  
 Germany water class : Not determined.

## 13. Disposal Consideration

Waste Handling and Disposal : Waste must be disposed of in accordance with federal, state and local environmental control regulations.

## 14. Transport Information

Regulatory Information	UN number	Proper shipping name	Class	Packing Group	Label	Additional information
DOT Classification	NA1993	Combustible liquids, n.o.s. (Sulfurized olefins, petroleum distillates).	Combustible Liquid.	III		-
TDG Classification	Not regulated.	-	-			-
ADR/RID Class	Not regulated.	-	-			-
IMDG Class	Not regulated.	-	-			-
IATA-DGR Class	Not regulated.	-	-			-

### Notice to Reader

The above transport information is provided to assist in the proper classification of this product and may not be suitable for all shipping conditions.

## 15. Regulatory Information

### EU Regulations

Risk Phrases : This product is not classified according to the EU regulations.  
Safety Phrases : Not applicable.

US Regulations : No SARA 313 chemicals are present above the reporting threshold.  
: SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Fire Hazard  
State : California prop. 65: No products were found.

### Canadian Regulations

WHMIS (Classification) : Not determined.

### International Inventory Status

United States : All components on TSCA Inventory  
Canada : All components on DSL  
Europe : All components on EINECS  
Japan : All components on MITI or MOL  
Australia : All components on NICNAS  
Korea : All components on ECL  
China : All components on IECSC  
Philippines : All components on PICCS

## 16. Other Information

### PREPARATION INFORMATION

Validated by \_HS&E Department (Tel: +1 804 788 5800) on 6/3/2004.

Version : 1

Date of Printing : 6/3/2004.

▣ Indicates information that has changed from previously issued version.

#### Notice to Reader

*This information and these recommendations are offered in good faith and believed to be correct as of the date hereof. Information and recommendations are supplied upon the condition that the recipients will make their own decision as to safety and suitability for their purposes. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose, or of any other nature, are made with respect to the product or the information and recommendations. Afton makes no representation as to completeness or accuracy. In no event will Afton be responsible for damages of any nature whatsoever resulting from the use or reliance upon the information and recommendations.*

### ADDRESS CONTACT INFORMATION

#### In the United States and Canada:

Afton Chemical Corporation  
500 Spring Street  
Richmond, Virginia  
USA 23219-2183  
Telephone number: 804-788-5800

#### In Singapore:

Afton Chemical Asia Pacific Company  
111 Somerset Road #13 - 03  
Singapore 238164  
Telephone number: 65-6732-0822

#### In Australia:

Afton Chemical Asia Pacific Company  
Level 9, 20 Berry Street  
North Sydney, NSW 2060  
Australia  
Telephone number: 02-9923-1588  
Business Hours: 9:00am - 5:00pm

#### In Europe:

Afton Chemical Limited  
Euro-Tech Centre  
London Road, Bracknell, Berkshire  
RG12 2UW, England  
44-1344-304141

#### In Japan:

Afton Chemical Japan Corporation  
Sumitomo Fudousan Sanbancho Bldg. 5F  
6-26 Sanbancho, Chiyoda-ku  
Tokyo 102-0075 Japan  
Emergency phone: 81-3-5210-4890

**\*\*\* END OF MSDS \*\*\***



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

AL

## Material / Product Approval Letter

Date 8/21/2008

Dear Ed Cox

Thank you for choosing CES Environmental Services, Inc. for your material / product recycling needs. The following material has been approved at our facility in Houston, TX. If the material received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # 2941

Expiration Date 8/21/2010

Modify

Producer: Afton Chemical Corporation

Address:

Suget, IL 62201

### Material / Product Information

Name of Material / Product:

Additives - Toxic

Container Type:

### Detailed Description of Process Generating or Producing the Material / Product:

out of date product

Color: amber—

Odor: slight pungent

pH: neutral

Physical State:

Incompatibilities: strong oxidizers

Safety Related Data/Special Handling:

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.



**CES Environmental  
Services, Inc.**

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

JB

**SECTION 1: Material Producer Information**

Company: Afton Chemical Corporation  
Address: 501 Monsanto Avenue  
City, State, Zip: Suget, IL 66201  
Contact: Ed Cox Title:  
Phone No: (618) 583-1078 Fax No: (618) 583-1388  
24/hr Phone: (618) 583-1078  
U.S. EPA I.D. No: na  
State I.D. na SIC Code: na

**SECTION 2: Billing Information - ☒ Same as Above**

Company:  
Address:  
City, State, Zip:  
Contact: Title:  
Phone No: Fax No:

**SECTION 3: General Description of the Material / Product**

Name of Material / Product: Additive - Toxic  
Detailed Description of Process Generating or Producing the Material / Product: \_\_\_\_\_

Off spec/out of Date Product

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: Varies

Odor: varies

Specific Gravity (water=1): varies Density: varies lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Container Size: 55 gal

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☒ Yearly

Number of Units (containers): varies Other: \_\_\_\_\_

Prodot  
Proper U.S. DOT Shipping Name: Environmentally hazardous substance, liquid, n.o.s.

Class: 9 UN/NA: UN 3082 PG: III RQ: \_\_\_\_\_

(contains 2,6-di-tert-butylphenol, Alkoxy sulfonate) Marine pollutant

Flash Point <u>2140</u>	<u>3-11</u>	N/A	N/A	Solids <u>&lt; 1</u> %
Oil & Grease <u>465</u> mg/l	TOC <u>4150</u> mg/l	Zinc <u>0</u> mg/l	Copper <u>0</u> mg/l	Nickel <u>0</u> mg/l

#### SECTION 4: Physical and Chemical Data

COMPONENTS TABLE		Concentration	Units
Product consists of the following materials		Ranges are acceptable	or %
Fuel Additive		100	%

#### SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.  
Standard

#### SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.

See MSDS on shared drive: Customer MSDS: Atton

#### SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

Strong Oxidizers

#### SECTION 8: Material Producer's Certification

The information contained herein is based on ☐ generator knowledge and/or ☒ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: None required - product Date: \_\_\_\_\_

Printed Name/Title: \_\_\_\_\_

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: <u>[Signature]</u>	
Date: <u>8-21-08</u>	Approved Rejected
Approval Number: <u>2941</u>	

**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

If brought in By CES on PCI back haul: no charge/  
no payment.  
If brought in by outside transporter at customer expense:  
pay \$0.15/gal Pay \$.019/pound.

**2. Contamination Limits (maximum limit before surcharges apply):**

If the drums are damaged and in an overpack and operations  
decides too many man hours are used to recover material  
then there will be no payment.

**3. Surcharge Pricing:**

**4. Special Testing Requirements:**

Record quantity in each drum. Number each drum  
and record amount and product type on inventory  
list. ~~add a copy of the order. The lab will not generate~~  
~~an invoice for total gallons received. Test density, pH. On inventory~~  
~~be sure to record the gallons received.~~

**5. Treatment and Handling Protocol:**

Once inventory has been given to product sales,  
the material will be resold as is, ~~according to~~  
directed by product sales person.

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A      ☐ Subcategory B      ☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**7. Tests for Product Recovered/Recycled (if applicable):**

*See special testing requirements.*

**8. Management for Product Recovered/Recycled (if applicable):**

*See treatment & handling protocol*

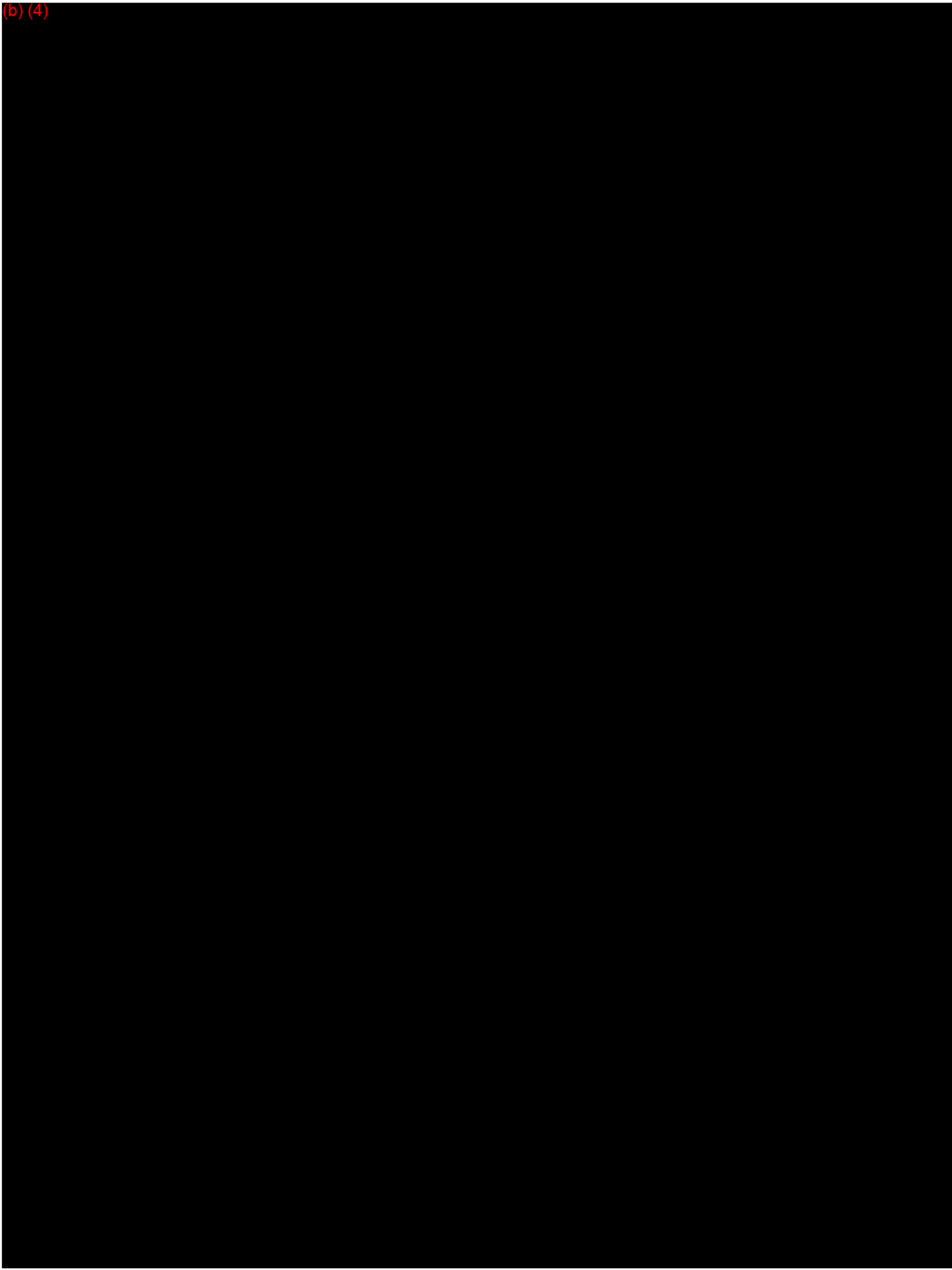
*One example*

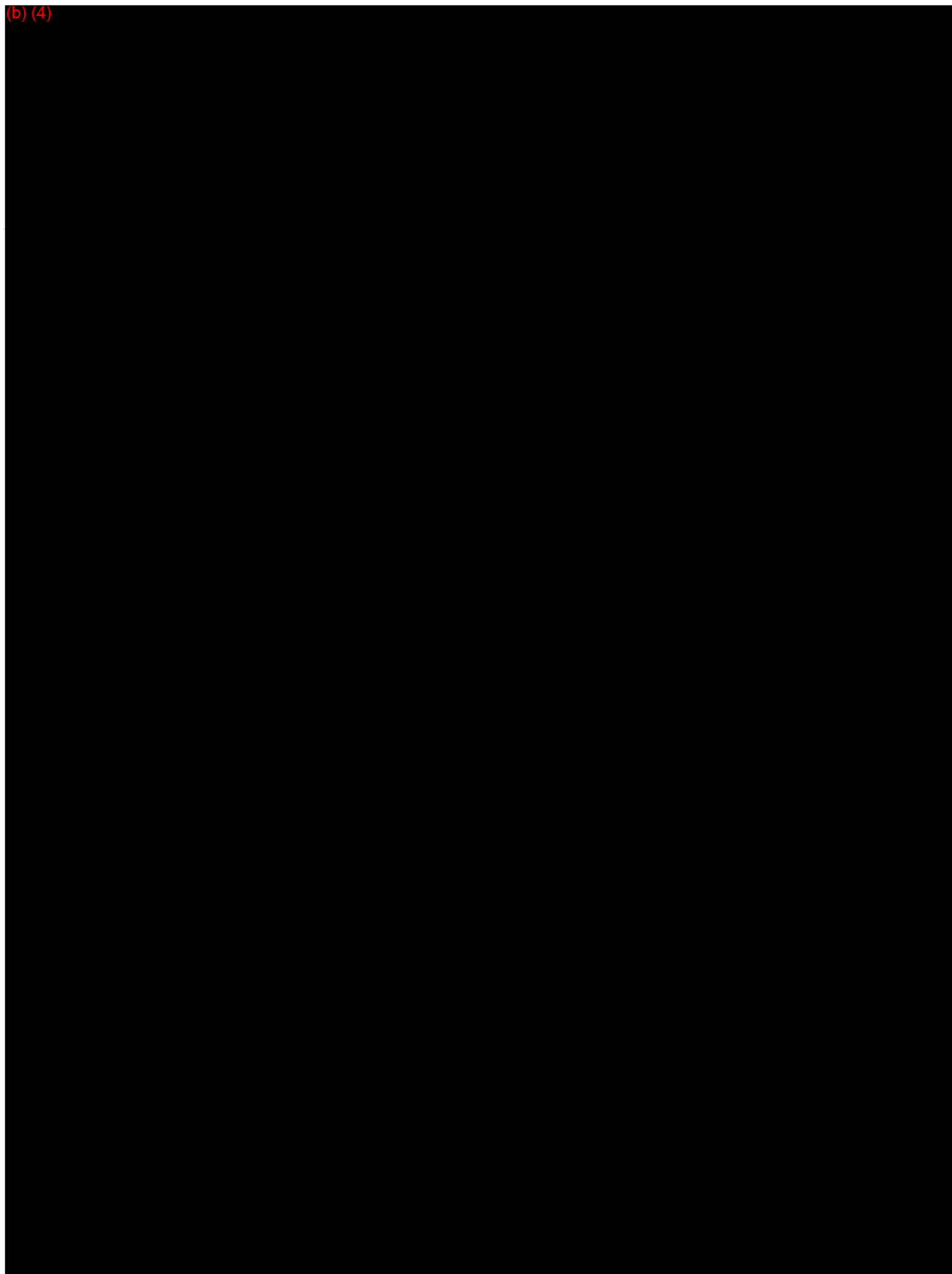


## Material Safety Data Sheet

(b) (4)

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(b) (4)



\*\*\* END OF MSDS \*\*\*

EPAHO106000494

Enterprise 2943

~~Air on chemical equipment~~



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 10/28/2008

Dear **Marty Goodpasture/Joe Hawkins**

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** HOU-2943

**Expiration Date** 10/28/2010

**Generator:** Enterprise Products Operating (Substation-Texas City)

**Address:** 700 14th Street South  
Texas City, TX 77590

### Waste Information

**Name of Waste:** Floor sweepings from empty natural gas storage tank

**TCEQ Waste Code #:** 00066951

**Container Type:**

**Detailed Description of Process Generating Waste:**

Cleaning of empty natural gas storage tank after internal repairs

**Color:** brown/black

**Odor:** none

**pH:** neutral

**Physical State:**

**Incompatibilities:** strong oxidizers

**Safety Related Data/Special Handling:**

level d

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000496

Need PFI

JP


**CES Environmental  
Services, Inc.**

GB

4904 Griggs Road Houston, TX 77021  
 Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>  
 TCEQ Industrial Solid Waste Permit No: 30948  
 U.S. EPA ID No: TXD008950461 ISWR No: 30900

**SECTION 1: Generator Information**

Company: Enterprise Products Operating (Texas City Terminal)  
 Address: 700 14<sup>th</sup> Street South  
 City, State, Zip: Texas City, TX 77590  
 Contact: Joe Hawkins Title: Manager  
 Phone No: 409-945-6622 Fax No:  
 24/hr Phone: CES-713-676-1460  
 U.S. EPA ID No:  
 State ID: SIC Code:

**SECTION 2: Billing Information - ☐ Same as Above**

Company: Enterprise Products Operating  
 Address: 11750 Alameda  
 City, State, Zip: Houston, TX 77045  
 Contact: Marty Goodpasture Title: Manager  
 Phone No: 832-347-4527 Fax No: 713-803-2250

**SECTION 3: General Description of the Waste**

Name of Waste: Floor Sweepings from empty natural gas storage tank

Detailed Description of Process Generating Waste: Cleaning of empty natural gas storage tank after internal repairs

Physical State: ☐ Liquid ☐ Sludge ☐ Powder  
☒ Solid ☐ Filter Cake ☐ Combination

Color: brown/black

Odor: none

Specific Gravity (water=1): 1.2

Density: 10 lbs/gal

Layers: ☒ Single-phase ☐ Multi-phaseContainer Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Container Size: 55 g

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☒ Yearly

Number of Units (containers): 4

Other: \_\_\_\_\_

Texas State Waste Code No: 00066951

Proper U.S. DOT Shipping Name: Non-RCRA; Non-DOT Regulated Material

Class: NA

UN/NA: NA

PG: NA

RQ: NA

Flash Point >150	pH neutral	Reactive Sulfides 0.60mg/l	Reactive Cyanides 0mg/l	Solids 100%
Oil & Grease >1500mg/l	TOC >1500mg/l	Zinc 0mg/l	Copper 0mg/l	Nickel 0mg/l

**SECTION 4: Physical and Chemical Data**

<b>COMPONENTS TABLE</b>	<b>Concentration</b>	<b>Units</b>
The waste consists of the following materials	Ranges are acceptable	or %
Rust Scale with Residual organic solids	90-98	%
Misc trash to include welding rods, wire brushes, rags, cans	2-10	%

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

Level D

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.

Mercury Analysis on the residual sludge from frac tank and Vac Box. Report Number 7100468 and 7100467

**SECTION 7: Incompatibilities**

Please list all incompatibilities (if any):

Oxidizers

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: ☒  
 TCLP Volatiles: ☒  
 TCLP Semi-Volatiles: ☒  
 Reactivity: ☒  
 Corrosivity: ☒  
 Ignitability: ☒

**SECTION 9: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☒ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: *D. S. Kief* Date: 10-16-08

Printed Name/Title: DW

**CES USE ONLY (DO NOT WRITE IN THIS SPACE)**

Compliance Officer: *Robert Bayard*

Date: 10-28-08 ☒ Approved ☐ Rejected

Approval Number: 2943

Additional Information: 55<sup>00</sup> / Drum

Trans 70<sup>00</sup> H<sub>2</sub> + FSC  
class 1 Box

**SECTION 10: Waste Receipt Classification Under 40 CFR 437**

Is this material a wastewater or wastewater sludge? ☐ YES ☒ NO

If 'Yes', complete this section.

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.**

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

- (1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.
- (2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L  
Chromium: 8.9 mg/L  
Copper: 4.9 mg/L  
Nickel: 37.5 mg/L

- (3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

#### **SECTION 11: Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

# Mercury Environmental Services, Inc.

6913 HWY 225, Deer Park, TX 77536  
Phone: (281)-476-4534 Fax: (281)-476-4406

**CES Environmental Services**  
4904 Criggs Rd  
Houston, TX 77021

Phone: (713) 676-1460  
Fax: (713) 676-1676

Attn: Gary Brauckman

## - CERTIFICATE OF RESULTS -

**MES Lab#:** 7100468  
**Client Sample ID:** Tank Bottoms  
**Extended ID:** Enterprise TX City

**Sample Collect Date:** 10/17/2007 @ 9:45:00 AM  
**Sample Receipt Date:** 10/17/2007 @ 12:00:00 PM

**Sample Type:** Grab

### Test Group / Method

TCLP Benzene Method: SW-846 8260B	MDL	RL	Result	Units	Analyst: HDG Date / Time
Benzene	0.005	0.5	0.059	mg/L	10/20/2007 / 8:53 PM
Reactivity, Recoverable Hydrogen Cyanide Method: 7.3.3.2	MDL		Result	Units	Analyst: CL Date / Time
Hydrogen Cyanide	0.25		< 0.25	mg/kg	10/18/2007 / 3:00 PM
Reactivity, Recoverable Hydrogen Sulfide Method: 7.3.4.2	MDL		Result	Units	Analyst: CL Date / Time
Hydrogen Sulfide	0.25		0.60	mg/kg	10/18/2007 / 4:10 PM
Corrosivity: pH Method: SW-846 9045	MDL		Result	Units	Analyst: JE Date / Time
pH			7.14		10/18/2007 / 11:30 AM
Ignitability Method: SW-846 1010	MDL		Result	Units	Analyst: DEB Date / Time
Flashpoint			>150	deg F	10/19/2007 / 12:35 PM
TCLP Metals (8) Method: SW-846 6010B	MDL	RL	Result	Units	Analyst: AM Date / Time
Arsenic	0.014	5	0.034	mg/L	10/18/2007 / 5:53 PM
Barium	0.0005	100	0.639	mg/L	10/18/2007 / 5:53 PM
Cadmium	0.002	1	0.003	mg/L	10/18/2007 / 5:53 PM
Chromium	0.002	5	< 0.002	mg/L	10/18/2007 / 5:53 PM
Lead	0.005	5	< 0.005	mg/L	10/18/2007 / 5:53 PM
Selenium	0.024	1	0.130	mg/L	10/18/2007 / 5:53 PM
Silver	0.002	5	< 0.002	mg/L	10/18/2007 / 5:53 PM

Report Date: 22-Oct-07

Page 1 of 2

**- CERTIFICATE OF RESULTS -**

**MES Lab#:** 7100468  
**Client Sample ID:** Tank Bottoms  
**Extended ID:** Enterprise TX City

**Sample Collect Date:** 10/17/2007 @ 9:45:00 AM  
**Sample Receipt Date:** 10/17/2007 @ 12:00:00 PM

**Sample Type:** Grab

TCLP Mercury					Analyst: AM
Method: SW-846 7470A	MDL	RL	Result	Units	Date / Time
Mercury	0.0002	0.2	0.0003	mg/L	10/19/2007 / 2:10 PM

**Flags:** H: Exceeds "High Limit" L: Below "Low Limit" RL=regulatory limit

  
Holland D. Gilmore, Laboratory Director

Monday, October 22, 2007

Date

**Report Date:** 22-Oct-07

Page 2 of 2

7100465 - 7100468

**MERCURY ENVIRONMENTAL SERVICES  
QA/QC REPORT**

ANALYTES	METHOD TPH1005	MB mg/kg	CCV %REC	MS %REC	MSD %REC
C6-C12		< 4	111.2	110.0	116.0
C12-C28		< 8	107.5	115.6	106.4

ANALYTES	METHOD 8021B	MB mg/L	MS %REC	MSD %REC	RPD	STD %REC
Benzene		< 0.005	90.8	91.0	0.22	89.6
Toluene		< 0.005	100.0	101.0	1.00	98.9
Ethylbenzene		< 0.005	99.8	104.0	4.12	99.7
m+p Xylene		< 0.005	102.0	112.0	9.35	110.3
o-Xylene		< 0.005	97.3	108.0	10.42	103.2

SURROGATE SPIKE RECOVERY FOR BTEX						% REC
4-Bromofluorobenzene						104.7

7100466 SURROGATE SPIKE RECOVERY FOR VOLATILES						% REC
Dibromofluoromethane						105.1
Toluene-d8						99.2
4-Bromofluorobenzene						99.2

7100467 SURROGATE SPIKE RECOVERY FOR VOLATILES						% REC
Dibromofluoromethane						105.6
Toluene-d8						95.1
4-Bromofluorobenzene						100.0

7100468 SURROGATE SPIKE RECOVERY FOR VOLATILES						% REC
Dibromofluoromethane						105.2
Toluene-d8						94.9
4-Bromofluorobenzene						101.2

Mercury Environmental Services, Inc.

## QA/QC REPORT CONTINUED

ANALYTE	MB mg/L	LCS %REC	LCSD %REC	RPD	CCB mg/L	CCV %REC	MS %REC	MSD %REC	RPD
Arsenic	< 0.002	90	81	9.9	< 0.002	97	58.4	59.0	0.92
Barium	< 0.002	83.3	88	5.26	< 0.002	101	60.5	60.4	0.2
Cadmium	< 0.001	88.2	87.5	0.80	< 0.001	98	62.0	63.0	1.6
Chromium	< 0.001	85	84	1.439	< 0.001	96	66.8	67.3	0.7
Lead	< 0.002	83.2	82.9	0.27	< 0.002	97	61.0	61.3	0.5
Mercury	< 0.0002	101.0	97.5	3.53	< 0.0002	102.0			
Selenium	< 0.024	66.4	80.1	18.8	< 0.024	99	56.4	59.3	5.0
Silver	< 0.001	94	92	2.809	< 0.001	97	66.1	63.3	4.33

## ANALYTE STD

Flashpoint 82°F

ANALYTE	BUFFER 7.0	ORIG	DUP	RPD
pH	7.0	6.90	6.98	1.15

ANALYTE	ORIG mg/kg	DUP mg/kg	RPD
Reactivity as Hydrogen Sulfide	0.38	0.38	0.00

ANALYTE	ORIG mg/kg	DUP mg/kg	RPD	STD %REC
Reactivity as Hydrogen Cyanide	< 0.25	< 0.25	0.00	103

## Standards Utilized:

BTEX: 5-point calibration utilizing working standards derived from neat solution of benzene, toluene, ethylbenzene, m-xylene, p-xylene and o-xylene.

Mercury Environmental Services, Inc.

**QA/QC REPORT CONTINUED**

**Key to QA Abbreviations**

MS=Matrix Spike

MSD=Matrix Spike Duplicate

RPD=Relative Percent Deviation

MB=Method Blank

LCS=Laboratory Control Standard

CCV=Continuing Calibration Verification

CCB=Continuing Calibration Blank

Rec=Percent Recovery

Signature: 

**Holland D. Gilmore / Laboratory Director**

**October 22, 2007**

*Mercury Environmental Services, Inc.*

COMPANY NAME: (BILL TO:) CEJ Environmental  
 COMPANY ADDRESS: \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_  
 CONTACT PERSON'S NAME: Gary Brauchman  
 CONTACT PERSON'S PHONE: 214-417-7337 FAX #: \_\_\_\_\_

**MES**

- CHAIN OF CUSTODY

1-800-771-4MES  
(281) 476-4534

Mercury Environmental Services  
6913 Hwy. 225 • Deer Park, TX 77536

Fax (281)-476-4406

PARAMETERS FOR ANALYSIS

4	BETA	TPH	TCUP Metals	PCB	TCUP Metals	NUMBER OF CONTAINERS	PRESERVATIONS	5	REMARKS
1	✓	✓				1	ADME	TURNAROUND TIME	<u>RUSH</u>
2	✓	✓				1	11	DETECTION LIMITS	
3			✓	✓	✓	1	11	SPECIAL LIMITS REQUIRED	
4			✓	✓	✓	1	11	Yes No	
								Please circle one, if Yes, please describe below or include separate sheet detailing requirements.	

YOUR PROJECT NO.: ENTERPRISE CITY YOUR P.O. #: 0601707 YOUR PROJECT NAME: ENTERPRISE CITY  
 PROJECT ADDRESS: \_\_\_\_\_

YOUR SAMPLE DESCRIPTION	GRAB/COMP.	DATE	TIME	MATRIX
1 Jet Rod Water <u>FRAC F04024</u>	C	10/17/07	9:00	Liq
2 Jet Rod Sludge <u>VB012505</u>	C	11	9:15	Sludge
<u>VB062508</u>				
3 Fracture to Homs <u>VB-042537</u>	G	11	9:20	11
4 Tank Bottoms <u>U-35</u>	G	11	9:45	11

PERSON TAKING SAMPLE SIGNATURE (a. - Print Name & b. - Sign.): Gary Brauchman

RELINQUISHED BY: (Signature) [Signature] DATE 10/17/07 TIME 12:00

RECEIVED BY: (Signature) [Signature]

RELINQUISHED BY: (Signature) \_\_\_\_\_ DATE \_\_\_\_\_ TIME \_\_\_\_\_

RECEIVED BY: (Signature) \_\_\_\_\_ DATE \_\_\_\_\_ TIME \_\_\_\_\_

METHOD OF PAYMENT \_\_\_\_\_ SHIPPED BY: (Signature) \_\_\_\_\_ COURIER (Signature) \_\_\_\_\_

RECEIVED FOR MES BY: (Signature) [Signature] DATE 10/17/07 TIME 12:00

Sample Remainder Disposal: ☒ Request Lab To Dispose Of All Sample Remainders

☐ Return Sample Remainder To Client: Via \_\_\_\_\_ (Signature) [Signature] (Date) 10-17-07

Form # MES - C2H

WHITE & CANARY - Shipped with Sample

PINK - Retained by Customer

WHITE - Returned with Report

2944  
CANRIG



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date **10/23/2008**

Dear **Paul Ashford**

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** HOU-2944

**Expiration Date** 10/23/2010

**Generator:** Canrig

**Address:** 14703 FM 1488  
Magnolia, TX 77354

### **Waste Information**

**Name of Waste:** RCRA empty containers

**TCEQ Waste Code #:** Recycle

**Container Type:**

**Detailed Description of Process Generating Waste:**

Out of use RCRA empty containers

**Color:** varies

**Odor:** none

**pH:** neutral

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000508

GB



<input checked="" type="checkbox"/> CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 TCEQ Industrial Solid Waste Permit Number: 30948	<input type="checkbox"/> CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88585
---	---

**SECTION 1: Generator Information**

Company: Canrig  
 Address: 14703 FM 1488  
 City: Magnolia State: TX Zip: 77354  
 Contact: Paul Ashford Title: \_\_\_\_\_  
 Phone Number: (281) 259-3139 Fax Number: (281) 259-3201  
 24/hr Phone Number: (281) 259-3139  
 US EPA ID No: TXCESQG  
 State ID No: CESQG SIC Code: na

**SECTION 2: Billing Information -** ☒ **Same as Above**

Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Contact: \_\_\_\_\_ Title: \_\_\_\_\_  
 Phone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_

**SECTION 3: General Description of the Waste**

Name of Waste: RCRA Empty Containers  
 Detailed Description of Process Generating Waste: \_\_\_\_\_

Out of use RCRA empty Containers

Physical State: ☐ Liquid ☐ Sludge ☐ Powder  
☒ Solid ☐ Filter Cake ☐ Combination

Color: varies Odor: none

Specific Gravity (water=1): na Density: na lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☒ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☒ Monthly ☐ Yearly ☐ One-Time

Quantity: 5

EPAHO106000509

☐ Yes ☒ No

**If “Yes”, Is it:**

☐ D002 (Corrosive)☐ D003 (Reactive)

D004

☐ D005☐ D006☐ D007

☐ D008

☐ D009

☐ D010

☐ D011

**Is this an "F" or "K" Listed waste or mixed with one?**

☐ Yes☒ No

**If "Yes", then please list ALL applicable codes:**

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No

☐ Yes☒ No

If "Yes", then please list ALL applicable codes:

**Texas State Waste Code Number:**

Recycle

**Proper US DOT Shipping Name:**

Non RCRA Non DOT Regulated Material

**Class:** na

UN/NA:

na

**PG :**

na

**RQ:**

---

na

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>200		neutral		0 <u>mg/l</u>		0      mg/l		100      %	
Oil & Grease		TOC		Zinc		Copper		Nickel	
0	mg/l	0	mg/l	0	mg/l	0	mg/l	0	mg/l

#### SECTION 4: Physical and Chemical Data

[illegible]

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

Standard

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.      none

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

none known

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	BRL
TCLP Volatiles:	BRL
TCLP Semi-Volatiles:	BRL
Reactivity:	NON REACTIVE
Corrosivity:	NON CORROSIVE
Ignitability:	NON IGNITABLE

**SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)**

Is this material a wastewater or wastewater sludge?

☐ YES

☒ NO

If 'Yes', complete this section.

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.**

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

- (1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.
- (2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.
- Cadmium: 0.2 mg/L
  - Chromium: 8.9 mg/L
  - Copper: 4.9 mg/L
  - Nickel: 37.5 mg/L
- (3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.
- ☐ Metals Subcategory
  - ☐ Oils Subcategory
  - ☐ Organics Subcategory

**SECTION 10 Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

**SECTION 11: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Paul Ashford Date: 10/22/2008

Printed Name/Title: Paul Ashford

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Compliance Officer: <u>Paul Ashford</u>	
Date: <u>10-23-08</u>	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Rejected
Approval Number: <u>2946</u>	



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**1. Base Pricing (including freight):**

Drum \$10 Tote \$100

**2. Contamination Limit (maximum limit before surcharges apply):**

Must be RCRA empty

**3. Surcharge Pricing:**

**4. Special Testing Requirements:**

**5. Treatment and Handling Protocol:**

Recycle

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A    ☐ Subcategory B    ☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**7. Tests for Product Recovered/Recycled (if applicable):**

--

**8. Management for Product Recovered/Recycled (if applicable)**

--

2945

Afton Chemical Corporation



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Material / Product Approval Letter

Date 8/22/2008

Dear Ed Cox

Thank you for choosing CES Environmental Services, Inc. for your material / product recycling needs. The following material has been approved at our facility in Houston, TX. If the material received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # 2945

Expiration Date 8/21/2010

Producer: Afton Chemical Corporation

Address:  
Suget, IL 62201

### Material / Product Information

Name of Material / Product hitec 307 performance additive

Container Type:

### Detailed Description of Process Generating or Producing the Material / Product:

out of date product

Color: clear

Odor: pungent

pH: neutral

Physical State:

Incompatibilities: strong oxidizers

Safety Related Data/Special Handling:

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000516



**CES Environmental  
Services, Inc.**

JB

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
http://www.cesenvironmental.com  
TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

**SECTION 1: Material Producer Information**

Company: Afton Chemical Corporation  
Address: 501 Monsanto Avenue  
City, State, Zip: Suget, IL 66201  
Contact: Ed Cox Title:  
Phone No: (618) 583-1078 Fax No: (618) 583-1388  
24/hr Phone: (618) 583-1078  
U.S. EPA I.D. No: na  
State I.D. na SIC Code: na

**SECTION 2: Billing Information - ☒ Same as Above**

Company:  
Address:  
City, State, Zip:  
Contact: Title:  
Phone No: Fax No:

**SECTION 3: General Description of the Material / Product**

Name of Material / Product: Hitec 307 Performance Additive  
Detailed Description of Process Generating or Producing the Material / Product: out of date product

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: clear

Odor: Pungent

Specific Gravity (water=1): 1 Density: 8.32 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)  
Container Size: 55 gal

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☒ Yearly

Number of Units (containers): 1 Other: Product

Proper U.S. DOT Shipping Name: Combustible Liquids, N.O.S., (Sulfurized olefins)

Class: 3 UN/NA: NA1993 PG: III RQ: 1000 lbs

Flash Point <u>&gt;140</u>	pH <u>Neutral</u>	N/A	N/A	Solids <u>1</u> %
Oil & Grease <u>&gt;1500</u> mg/l	TOC <u>&lt;1500</u> mg/l	Zinc <u>0</u> mg/l	Copper <u>0</u> mg/l	Nickel <u>0</u> mg/l

#### SECTION 4: Physical and Chemical Data

COMPONENTS TABLE		Concentration	Units
The material / product consists of the following materials		Ranges are acceptable	or %
Hitec 307 Performance Additive (See MSDS)		<u>LEV</u>	<u>%</u>

#### SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.  
Standard

#### SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.  
HiTEC 307 MSDS

#### SECTION 7: Incompatibilities

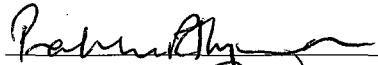
Please list all incompatibilities (if any):  
Strong Oxidizers

#### SECTION 8: Material Producer's Certification

The information contained herein is based on ☐ generator knowledge and/or ☒ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name/Title: \_\_\_\_\_

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: <u></u>	
Date: <u>8-21-08</u>	<u>Approved</u> Rejected
Approval Number: <u>2945</u>	

**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

1. **Base Pricing (including freight):**

If brought in By CES on PCI back haul: no charge/  
no payment.  
If brought in by outside transporter at customer expense:  
pay \$0.15/gal

2. **Contamination Limits (maximum limit before surcharges apply):**

3. **Surcharge Pricing:**

4. **Special Testing Requirements:**

Record quantity in each drum. Number each drum  
and record amount and product type on inventory  
list.

5. **Treatment and Handling Protocol:**

Once inventory has been given to product sales,  
the material will be resold as is, ~~according to~~  
directed by product sales person.

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A      ☐ Subcategory B      ☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**7. Tests for Product Recovered/Recycled (if applicable):**

see special testing requirements

**8. Management for Product Recovered/Recycled (if applicable):**

see treatment & handling protocol



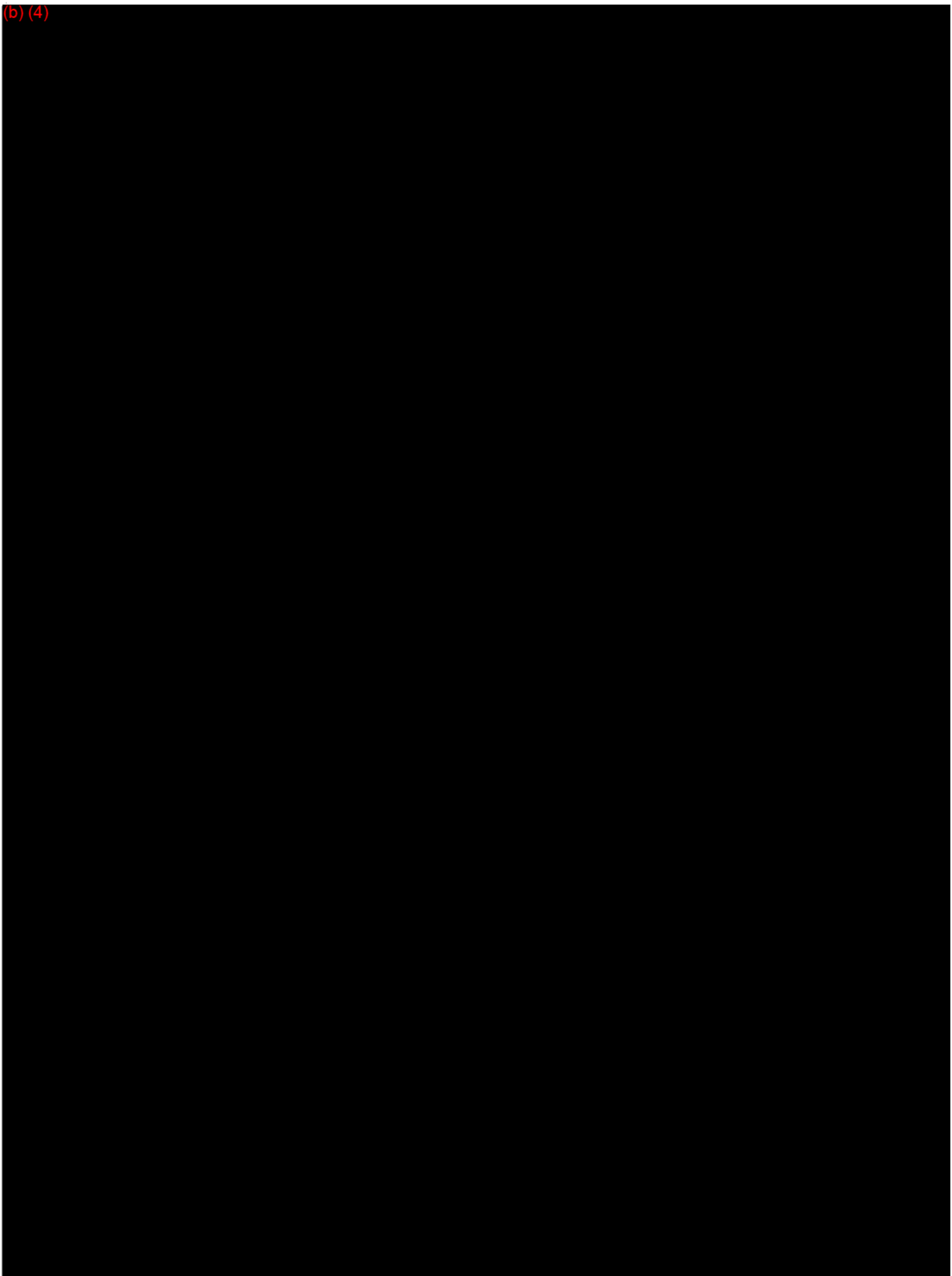
## Material Safety Data Sheet

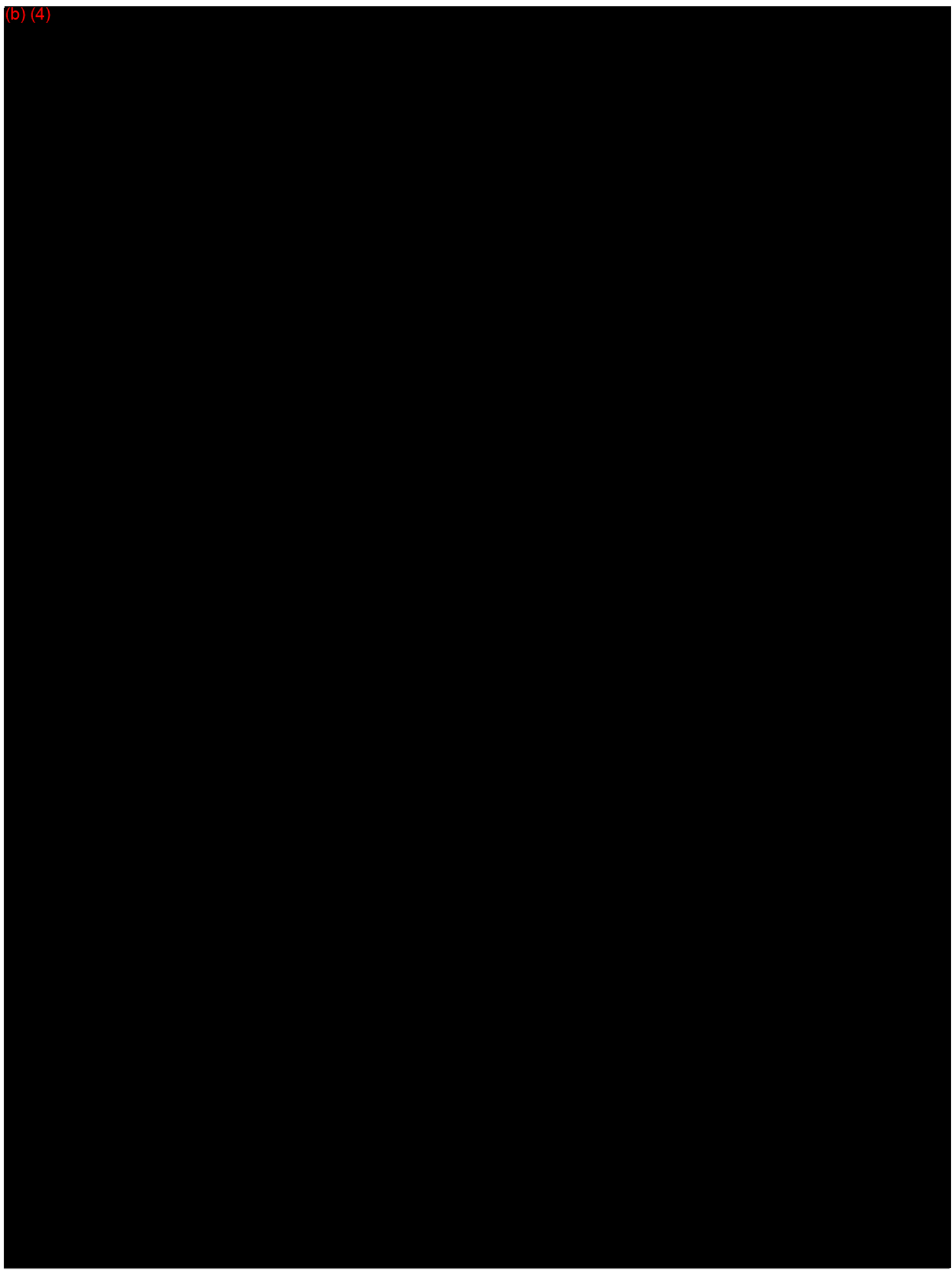
(b) (4)

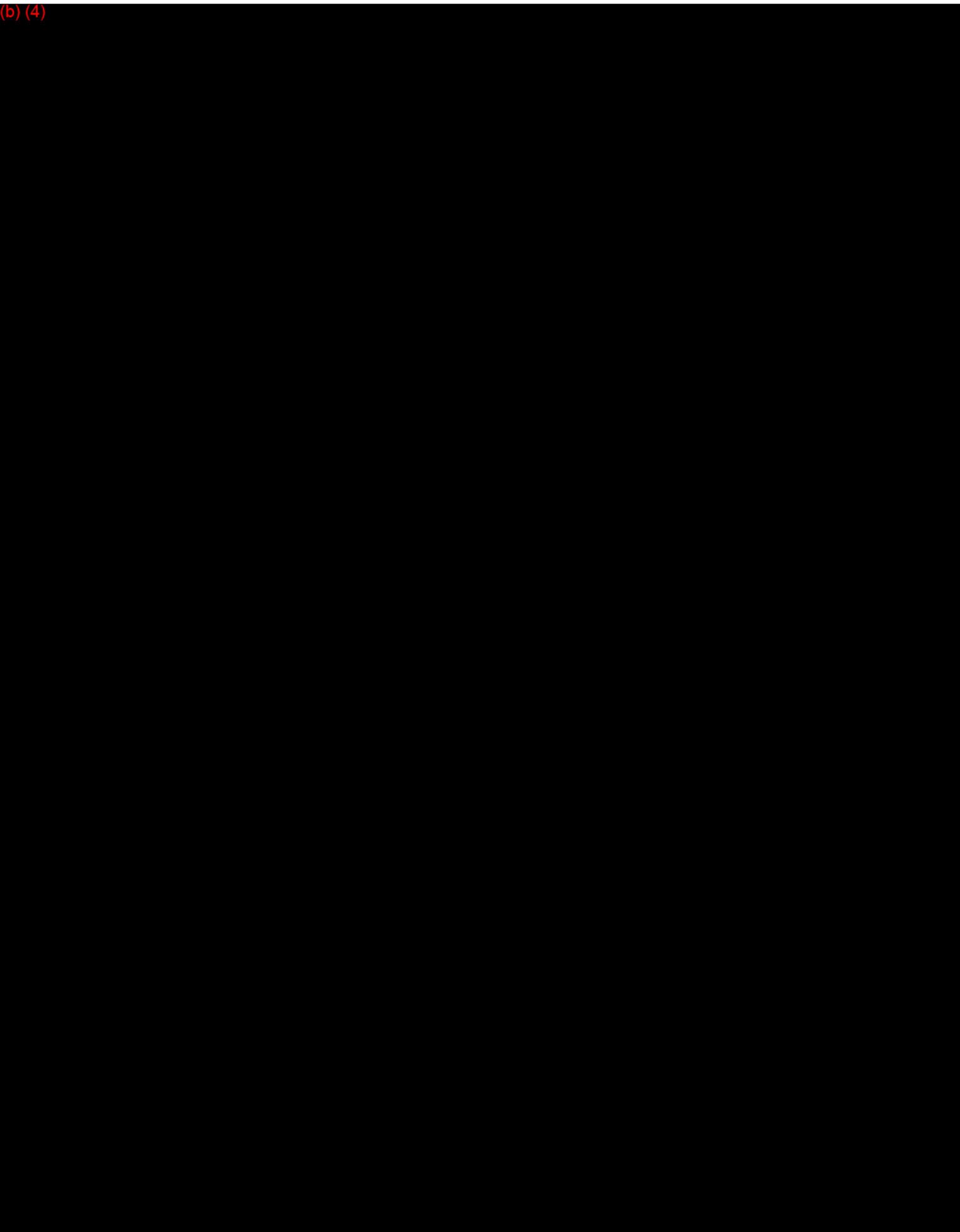
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(b) (4)









(b) (4)



\*\*\* END OF MSDS \*\*\*

YRP



**CES Environmental  
Services, Inc.**

AL

4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Material / Product Approval Letter

Date 8/22/2008

Dear Ed Cox

Thank you for choosing CES Environmental Services, Inc. for your material / product recycling needs. The following material has been approved at our facility in Houston, TX. If the material received does not conform to the profile, then rejection or additional charges may apply.

Modified

CES Profile # 2945

Expiration Date 8/21/2010

Producer: Afton Chemical Corporation

Address:

Suget, IL 62201

### Material / Product Information

Name of Material / Product Additives - Combustible

Container Type:

### Detailed Description of Process Generating or Producing the Material / Product:

out of date product

Color: clear

Odor: pungent

pH: neutral

Physical State:

Incompatibilities: strong oxidizers

Safety Related Data/Special Handling:

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000527



**CES Environmental  
Services, Inc.**

JB

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
http://www.cesenvironmental.com  
TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

**SECTION 1: Material Producer Information**

Company: Afton Chemical Corporation  
Address: 501 Monsanto Avenue  
City, State, Zip: Suget, IL 66201  
Contact: Ed Cox Title:  
Phone No: (618) 583-1078 Fax No: (618) 583-1388  
24/hr Phone: (618) 583-1078  
U.S. EPA I.D. No: na  
State I.D. na SIC Code: na

**SECTION 2: Billing Information - ☒ Same as Above**

Company:  
Address:  
City, State, Zip:  
Contact: Title:  
Phone No: Fax No:

**SECTION 3: General Description of the Material / Product**

Name of Material / Product: Additive - Combustible  
Detailed Description of Process Generating or Producing the Material / Product: Off-spec / out of date product

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: \_\_\_\_\_

Odor: \_\_\_\_\_

Specific Gravity (water=1) \_\_\_\_\_ Density \_\_\_\_\_ s/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)  
Container Size: 55 gal

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☒ Yearly

Number of Units (containers): \_\_\_\_\_ Other: \_\_\_\_\_

Proper U.S. DOT Shipping Name: Product  
Combustible Liquids, N.O.S., (Sulfurized olefins)

Class: 3 UN/NA: NA1993 PG: III RQ: 1000 lbs

Flash Point 200°F	pH 3-11	N/A	N/A	Solids <1 %
Oil & Grease 1500 mg/l	TOC 1500 mg/l	Zinc 0 mg/l	Copper 0 mg/l	Nickel 0 mg/l

#### SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	Concentration	Units
The material / product consists of the following materials	Ranges are acceptable	or %
See MSDS		
Performance / Fuel Additive	100	%

#### SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.  
Standard

#### SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.

See MSDS on shared drive : Customer MSDS : Afton

#### SECTION 7: Incompatibilities

Please list all incompatibilities (if any):  
Strong Oxidizers

#### SECTION 8: Material Producer's Certification

The information contained herein is based on ☐ generator knowledge and/or ☒ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: No signature req'd - product Date: \_\_\_\_\_

Printed Name/Title: \_\_\_\_\_

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: <u>[Signature]</u>	
Date: <u>8-21-08</u>	<input checked="" type="radio"/> Approved <input type="radio"/> Rejected
Approval Number: <u>2945</u>	

**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

If brought in By CES on PCI back haul: no charge/  
no payment.  
If brought in by outside transporter at customer expense:  
pay \$0.15/gal Pay \$.019/gal pound

**2. Contamination Limits (maximum limit before surcharges apply):**

If drums are damaged and are in an overpack and operating  
determines too many man hours are used to recover the  
material then there will be no. ~~that~~ payment.

**3. Surcharge Pricing:**

**4. Special Testing Requirements:**

Record quantity in each drum. Number each drum  
and record amount and product type on inventory  
list. Bring to total gallons. Be sure to record this on a copy of the  
order. The list will need to go in an inbound for total gallons  
Be sure to do an inbound to show total gallons received.

**5. Treatment and Handling Protocol:**

Once inventory has been given to product sales,  
the material will be resold as is, according to  
directed by product sales person.

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A      ☐ Subcategory B      ☐ Subcategory C

7. Tests for Product Recovered/Recycled (if applicable):

see Special testing requirements

8. Management for Product Recovered/Recycled (if applicable):

see treatment & handling protocol

*One example*



Afton®

## Material Safety Data Sheet

(b) (4)

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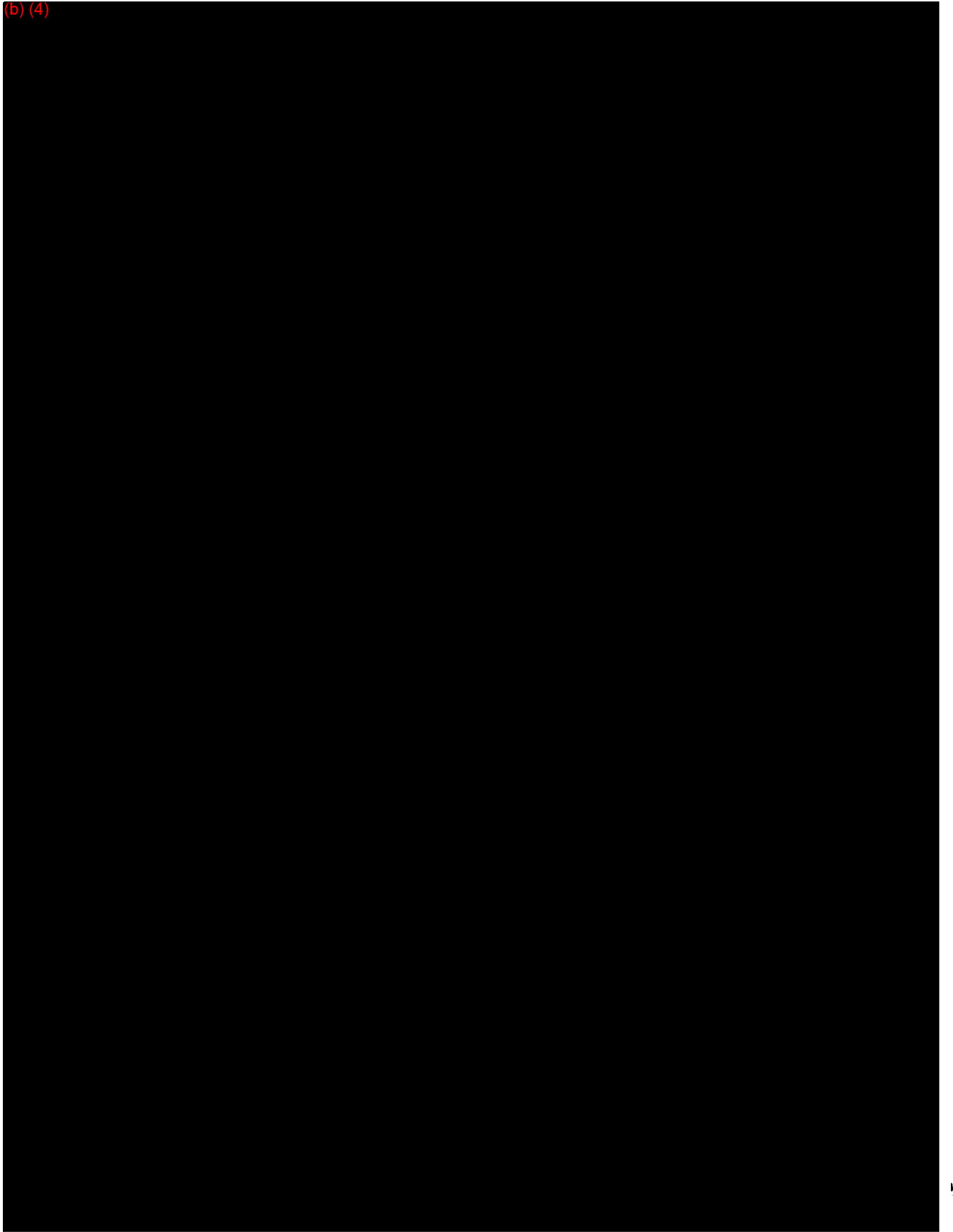
(b) (4)





(b) (4)





(b) (4)



\*\*\* END OF MSDS \*\*\*

2946

Ameriforge



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date **10/23/2008**

Dear **Jimmy Watts**

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** HOU-2946

**Expiration Date** 10/23/2010

**Generator:** Ameriforge Woodville

**Address:** 483 CR 3020  
Woodville, TX 75979

### **Waste Information**

**Name of Waste:** Recyclable oily absorbent

**TCEQ Waste Code #:** Recycle

**Container Type:**

**Detailed Description of Process Generating Waste:**

Absorbent used to clean up oil in machine shop

**Color:** varies

**Odor:** hydrocarbon

**pH:** na

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000539



**CES Environmental  
Services, Inc.**

4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

*Houston  
Terminal*

**SECTION 1: Generator Information**

Company: Ameriforge Woodville

Address: 483 CR 3020

City: Woodville

State: TX

Zip: 75979

Contact: Jimmy Watts

Title: Maintenance Manager

Phone Number: 409-283-8138 x 5327

Fax Number: 409-331-9089

24/hr Phone Number: 409-429-0489

US EPA ID No: TXD988041620

State ID No: 20154

SIC Code:

**SECTION 2: Billing Information - ☐ Same as Above**

Company: Ameriforge Woodville

Address: P.O. Box 2070

City: Woodville

State: TX

Zip: 75979

Contact:

Title:

Phone Number:

Fax Number:

**SECTION 3: General Description of the Waste**

Name of Waste: Recyclable Oily Absorbent

Detailed Description of Process Generating Waste:

Absorbent used to clean up oil in machine shop

Physical State: ☐ Liquid  
☒ Solid

☐ Sludge  
☐ Filter Cake

☐ Powder  
☐ Combination

Color: varies

Odor: Hydrocarbon

Specific Gravity (water=1): 1.2

Density: 8.5 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☒ Yearly ☐ One-Time

Quantity: 10

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☒ No

**B**

**If "Yes", Is It:** ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)  
**Characteristic for Toxic Metals:** ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009  
☐ D010 ☐ D011

**Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)**

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☒ No  
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No

**If "Yes", then please list ALL applicable codes:**

**Texas State Waste Code Number:** Recyclable Material

**Proper US DOT Shipping Name:** Non RCRA Non DOT Regulated Solids

<b>Class:</b>	NA	<b>UN/NA:</b>	NA	<b>PG :</b>	NA	<b>RQ:</b>	NA
---------------	----	---------------	----	-------------	----	------------	----

<b>Flash Point</b>		<b>pH</b>		<b>Reactive Sulfides</b>		<b>Reactive Cyanides</b>		<b>Solids</b>	
>150		NA		NA <u>mg/l</u>		NA <u>mg/l</u>		100	%
<b>Oil &amp; Grease</b>		<b>TOC</b>		<b>Zinc</b>		<b>Copper</b>		<b>Nickel</b>	
>1500	<u>mg/l</u>	NA	<u>mg/l</u>	NA	<u>mg/l</u>	NA	<u>mg/l</u>	NA	<u>mg/l</u>

## **SECTION 4: Physical and Chemical Data**

[illegible]

## **SECTION 5: Safety Related Data**

**If the handling of this waste requires the use of special protective equipment, please explain.**

### Standard

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. Analytical 7060125

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):  
None

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:

TCLP Volatiles:

TCLP Semi-Volatiles:

Reactivity:

Corrosivity:

Ignitability:

X

X

X

X

x

**SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)**

Is this material a wastewater or wastewater sludge?

☐ YES

☒ NO

If 'Yes', complete this section.

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.**

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L  
Chromium: 8.9 mg/L  
Copper: 4.9 mg/L  
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

**SECTION 10 Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

**SECTION 11: Generator's Certification**

The information contained herein is based on ☐ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_

Date: 10/22/2008

Printed Name/Title: Jimmy Watts / Maintenance Manager

**CES USE ONLY (DO NOT WRITE IN THIS SPACE)**

Compliance Officer: \_\_\_\_\_

Date: 10-23-08

Approval Number: 2946

☒ Approved

☐ Rejected



PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

\$35.00/drum plus freight

2. Contamination Limit (maximum limit before surcharges apply):

None

must fit profile

3. Surcharge Pricing:

None

4. Special Testing Requirements:

None

must not have free liquids

5. Treatment and Handling Protocol:

RECYCLE

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A    ☐ Subcategory B    ☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**7. Tests for Product Recovered/Recycled (if applicable):**

NA

**8. Management for Product Recovered/Recycled (if applicable)**

NA

# Mercury Environmental Services, Inc.

6913 HWY 225, Deer Park, TX 77536  
Phone: (281)-476-4534 Fax: (281)-476-4406

**MES Environmental Services**  
4904 Griggs Rd  
Houston, TX 77021

Phone: (713) 676-1460  
Fax: (713) 676-1676

Attn: **Dana Carter**

## - CERTIFICATE OF RESULTS -

**MES Lab#:** 7060125  
**Client Sample ID:** Absorbent  
**Extended ID:** Texas Metal Works

**Sample Collect Date:** 6/6/2007 @ 4:00:00 PM  
**Sample Receipt Date:** 6/7/2007 @ 4:35:00 PM

**Sample Type:** Grab

### Test Group / Method

TCLP Metals (8) Method: SW-846 6010B					Analyst: HDGIL Date / Time
	MDL	RL	Result	Units	
Arsenic	0.014	5	0.015	mg/L	6/12/2007 / 12:12 AM
Barium	0.0005	100	0.527	mg/L	6/12/2007 / 12:12 AM
Cadmium	0.002	1	< 0.002	mg/L	6/12/2007 / 12:12 AM
Chromium	0.002	5	0.006	mg/L	6/12/2007 / 12:12 AM
Lead	0.005	5	< 0.005	mg/L	6/12/2007 / 12:12 AM
Selenium	0.024	1	< 0.024	mg/L	6/12/2007 / 12:12 AM
Silver	0.002	5	< 0.002	mg/L	6/12/2007 / 12:12 AM
TCLP Mercury Method: SW-846 7470A					Analyst: AM Date / Time
	MDL	RL	Result	Units	
Mercury	0.0002	0.2	< 0.0002	mg/L	6/8/2007 / 5:24 PM
BTEX Method: SW-846 8021B					Analyst: HDG Date / Time
	MDL		Result	Units	
Benzene	0.5		< 0.5	mg/kg	6/11/2007 / 7:37 PM
Toluene	0.5		< 0.5	mg/kg	6/11/2007 / 7:37 PM
Ethyl benzene	0.5		< 0.5	mg/kg	6/11/2007 / 7:37 PM
M+P-Xylene	0.5		0.6	mg/kg	6/11/2007 / 7:25 PM
o-Xylene	0.5		< 0.5	mg/kg	6/11/2007 / 7:25 PM

Flags: H: Exceeds "High Limit" L: Below "Low Limit" RL=regulatory limit



Holland D. Gilmore, Laboratory Director

Thursday, June 14, 2007

Date

# Mercury Environmental Services, Inc.

6913 HWY 225, Deer Park, TX 77536  
Phone: (281)-476-4534 Fax: (281)-476-4406

**CES Environmental Services**  
4904 Griggs Rd  
Houston, TX 77021

Phone: (713) 676-1460  
Fax: (713) 676-1676

Attn: **Dana Carter**

## - CERTIFICATE OF RESULTS -

**MES Lab#:** 7060126  
**Client Sample ID:** Sump Sludge  
**Extended ID:** Texas Metal Works

**Sample Collect Date:** 6/6/2007 @ 4:00:00 PM  
**Sample Receipt Date:** 6/7/2007 @ 4:35:00 PM

**Sample Type:** Comp

### Test Group / Method

TCLP Metals (8) Method: SW-846 6010B					Analyst: HDGIL Date / Time
MDL	RL	Result	Units		
Arsenic	0.014	5	< 0.014	mg/L	6/12/2007 / 12:18 AM
Barium	0.0005	100	<b>0.397</b>	mg/L	6/12/2007 / 12:18 AM
Cadmium	0.002	1	< 0.002	mg/L	6/12/2007 / 12:18 AM
Chromium	0.002	5	<b>0.004</b>	mg/L	6/12/2007 / 12:18 AM
Lead	0.005	5	< 0.005	mg/L	6/12/2007 / 12:18 AM
Selenium	0.024	1	< 0.024	mg/L	6/12/2007 / 12:18 AM
Silver	0.002	5	< 0.002	mg/L	6/12/2007 / 12:18 AM

TCLP Mercury Method: SW-846 7470A					Analyst: AM Date / Time
MDL	RL	Result	Units		
Mercury	0.0002	0.2	< 0.0002	mg/L	6/8/2007 / 5:27 PM

BTEX Method: SW-846 8021B					Analyst: HDG Date / Time
MDL		Result	Units		
Benzene	0.5	< 0.5	mg/kg		6/11/2007 / 11:27 PM
Toluene	0.5	< 0.5	mg/kg		6/11/2007 / 11:27 PM
Ethyl benzene	0.5	< 0.5	mg/kg		6/11/2007 / 11:27 PM
M+P-Xylene	0.5	< 0.5	mg/kg		6/11/2007 / 11:27 PM
o-Xylene	0.5	< 0.5	mg/kg		6/11/2007 / 11:27 PM

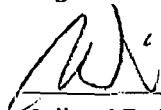
Reactivity, Recoverable Hydrogen Cyanide Method: 7.3.3.2					Analyst: CL Date / Time
MDL		Result	Units		
Hydrogen Cyanide	0.25	< 0.25	mg/kg		6/8/2007 / 2:16 PM

Reactivity, Recoverable Hydrogen Sulfide Method: 7.3.4.2					Analyst: CL Date / Time
MDL		Result	Units		
Hydrogen Sulfide	0.25	< 0.25	mg/kg		6/8/2007 / 12:00 PM

**- CERTIFICATE OF RESULTS -****MES Lab#:** 7060126**Client Sample ID:** Sump Sludge**Extended ID:** Texas Metal Works**Sample Collect Date:** 6/6/2007 @ 4:00:00 PM**Sample Type:** Comp**Sample Receipt Date:** 6/7/2007 @ 4:35:00 PM

Corrosivity: pH				Analyst: CL
Method: SW-846 9045	MDL	Result	Units	Date / Time
pH		8.61		6/8/2007 / 10:48 AM
Ignitability				Analyst: DEB
Method: SW-846 1010	MDL	Result	Units	Date / Time
Flashpoint		>150	deg F	6/8/2007 / 11:30 AM

Flags: H: Exceeds "High Limit" L: Below "Low Limit" RL=regulatory limit



Holland D. Gilmore, Laboratory Director

Thursday, June 14, 2007

Date

7060125 - 7060126

**MERCURY ENVIRONMENTAL SERVICES  
QA/QC REPORT**

ANALYTE	MB mg/L	LCS %REC	LCSD %REC	RPD	CCB mg/L	CCV %REC	MS %REC	MSD %REC	RPI
Arsenic	< 0.002	94	94	0.7	< 0.002	91	76.4	77.2	1.04
Barium	< 0.002	105.0	105	0.43	< 0.002	101	65.2	67.7	3.8
Cadmium	< 0.001	109.4	110.9	1.32	< 0.001	107	70.9	72.0	1.5
Chromium	< 0.001	109	107	2.50	< 0.001	103	70.0	72.2	3.0
Lead	< 0.002	106.1	109.2	2.90	< 0.002	107	67.7	71.9	6.1
Mercury	< 0.0002	101.0	97.5	3.53	< 0.0002	102.0			
Selenium	< 0.024	108.1	91.4	16.7	< 0.024	87	64.9	61.8	5.0
Silver	< 0.001	110	109	0.91	< 0.001	104	73.4	75.6	3.06

ANALYTE	STD
---------	-----

Flashpoint	82°F
------------	------

ANALYTE	BUFFER 7.0	ORIG	DUP	RPD
pH	7.0	8.23	8.26	0.00

ANALYTE	ORIG mg/kg	DUP mg/kg	RPD
Reactivity as Hydrogen Sulfide	< 0.25	< 0.25	0.00

ANALYTE	ORIG mg/kg	DUP mg/kg	RPD	STD %REC
Reactivity as Hydrogen Cyanide	< 0.25	< 0.25	0.00	104

ANALYTES	METHOD 8021B	MB mg/kg	MS %REC	MSD %REC	RPD	STD %REC
Benzene		< 0.5	90.8	91.0	0.22	89.6
Toluene		< 0.5	100.0	101.0	1.00	98.9
Ethylbenzene		< 0.5	99.8	104.0	4.12	99.7
m+p Xylene		< 0.5	102.0	112.0	9.35	110.3
o-Xylene		< 0.5	97.3	108.0	10.42	103.2

Mercury Environmental Services, Inc.

EPAHO106000549

7060125 - 7060126  
Page 2

## QA/QC REPORT CONTINUED

7060125	
SURROGATE SPIKE RECOVERY FOR BTEX	
	% REC
4-Bromofluorobenzene	103.2

7060126	
SURROGATE SPIKE RECOVERY FOR BTEX	
	% REC
4-Bromofluorobenzene	97.7

## Standards Utilized:

BTEX: 5-point calibration utilizing working standards derived from neat solution of benzene, toluene, ethylbenzene, m-xylene, p-xylene and o-xylene.

## Key to QA Abbreviations

MS=Matrix Spike  
MSD=Matrix Spike Duplicate  
RPD=Relative Percent Deviation  
MB=Method Blank

LCS=Laboratory Control Standard  
CCV=Continuing Calibration Verification  
CCB=Continuing Calibration Blank  
Rec=Percent Recovery

Signature:   
Holland D. Gilmore / Laboratory Director

June 14, 2007

Mercury Environmental Services, Inc.

EPAHO106000550

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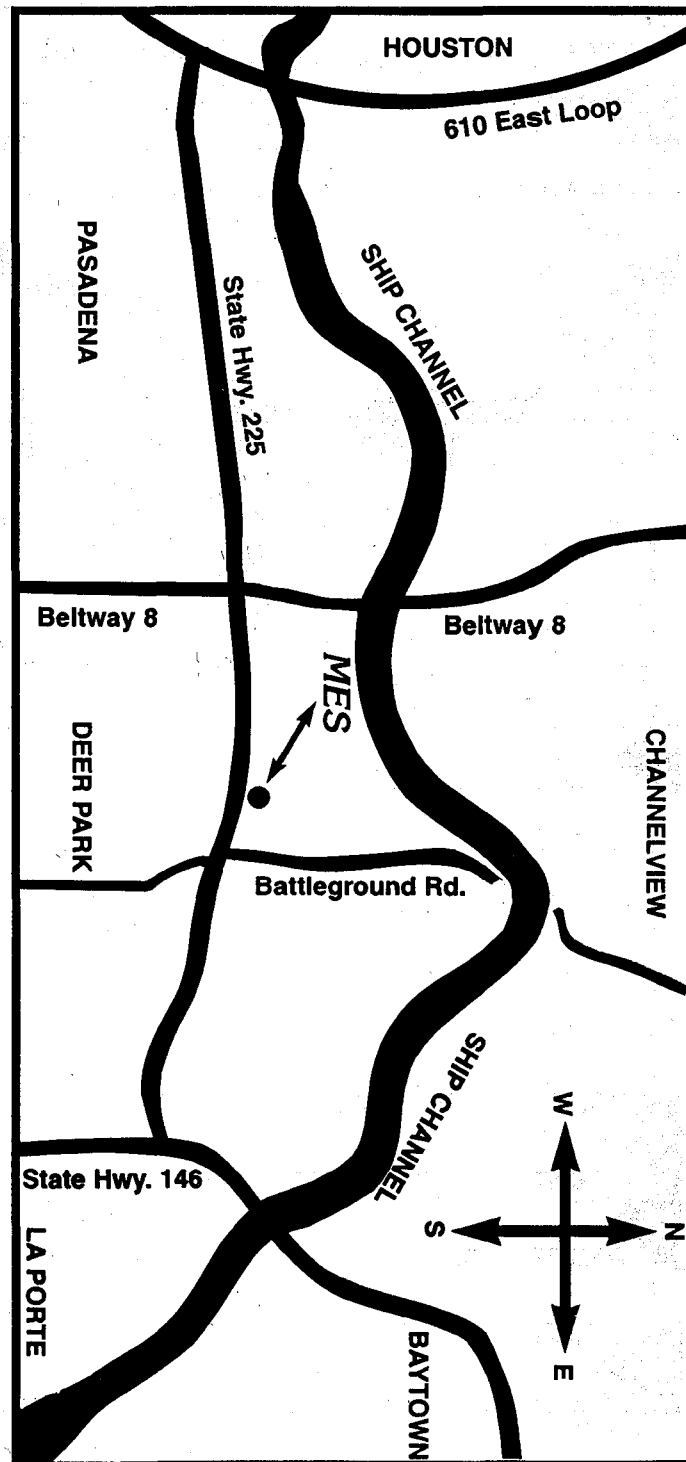
COMPANY NAME: (BILL TO): CES Environmental  
COMPANY ADDRESS: 49021 Griggs Rd  
CITY: Houston STATE: TX ZIP: 77021  
CONTACT PERSON'S NAME: Dana Carter  
CONTACT PERSON'S PHONE: 713-748-9804 FAX #: 713-676-1676

## CHAIN OF CUSTODY

A chain of custody is one of the first steps in sample control in the laboratory. The Chain of custody is a "contract between the client and the laboratory to insure that all information from the client is transmitted to the laboratory in an ordered fashion. The company designated in Section 1 will be held liable for all invoicing related to this chain of custody per terms agreed upon.

### Procedure

- A. A three copy chain of custody shall be used. A ball-point pen, either blue or black shall be used, pressing hard to make all three copies
- B. Writing legibly, or printing, fill out the chain of custody as follows:
  1. Name of Company  
Address of Company  
Name of Person to Contact  
Contact Person's Phone Number
  2. Your Project Number  
Purchase Order Number  
Your Project Name and Address
  3. Sample Description(s)  
Date, Time and Matrix
  4. Parameters to be tested on samples  
Check parameter squares with sample descriptions
  5. Remarks  
Turn Around Time (TAT) required (normal TAT, Rush, etc.)  
Special Methods and Detection Limits, if needed
  6. a. Print Sampler's Name  
b. Sampler's Signature
  7. Sample Possession Information
  8. Sample Disposal  
Means of Disposal



WHITE & CANARY – Shipped with Sample

PINK – Retained by Customer

WHITE – Returned with Report

2947 ATG  
~~Aflon Chemical Corporation~~



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 10/29/2008

Dear Dan Stinson

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** HOU-2947

**Expiration Date** 8/21/2010

**Generator:** AT&T

**Address:** 1121 Capitol  
Houston, TX 77002

### Waste Information

**Name of Waste:** TPH Contaminated Soil

**TCEQ Waste Code #:** CESQ3191

**Container Type:** vac box

**Detailed Description of Process Generating Waste:**

soil and water removed from around an underground storage tank last containing diesel

**Color:** light to dark brown      **Odor:** slight hydrocarbon      **pH:** 4-9

**Physical State:**

**Incompatibilities:** oxidizers

**Safety Related Data/Special Handling:**

level D PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.



☐ CES Environmental Services – Houston Facility  
4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☐ CES Environmental Services – Port Arthur Facility  
2420 S. Gulfway Drive, Port Arthur, TX 77641  
Phone: (713) 676-1460 Fax: (713) 676-1676  
U.S. EPA ID No: TXR000079307 ISWR No: 88585

**SECTION 1: Material Producer Information**

Company: AT&T  
Address: 1121 Capitol  
City, State, Zip: Houston, TX 77002  
Contact: Dan Stinson Title: Agent for generator  
Phone No: 713-829-6906 Fax No: 281-331-9509  
24/hr Phone: 713-829-6906  
U.S. EPA I.D. No: Na  
State I.D. Na SIC Code:

**SECTION 2: Billing Information – ☐ Same as Above**

Company: B & K Services  
Address: PO Box 2563  
City, State, Zip: Alvin, TX 77512  
Contact: 713-829-6906 Title: Agent for Generator  
Phone No: 713-829-6906 Fax No: 281-331-9509

**SECTION 3: General Description of the Material / Product**

Name of Material / Product: TPH Contaminated Soil

Detailed Description of Process Generating or Producing the Material / Product: Soil and water removed from around an underground storage tank last containing diesel

Physical State: ☐ Liquid ☐ Sludge ☐ Powder  
☒ Solid ☐ Filter Cake ☐ Combination

Color: Varies

Odor: Slight Hydrocarbon

Specific Gravity (water=1): 1.2-1.5 Density: 10-12 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☐ Truck ☒ Other (explain)  
Container Size: \_\_\_\_\_ Vacuum Box

Frequency: ☐ Weekly ☒ Monthly ☐ Quarterly ☐ Yearly  
Number of Units (containers): 1-4 Other: \_\_\_\_\_

Proper U.S. DOT Shipping Name: CESQ 3191  
TPH Contaminated Soil  
Class: Na UN/NA: Na PG: Na RQ: Na

Flash Point >160	pH 4-9	N/A	N/A	Solids 50-90%
Oil & Grease >100mg/l	TOC NAmg/l	Zinc NAmg/l	Copper NAmg/l	Nickel NAmg/l

#### **SECTION 4: Physical and Chemical Data**

<b>COMPONENTS TABLE</b>	<b>Concentration</b>	<b>Units</b>
The material / product consists of the following materials	Ranges are acceptable	or %
Soil	87-94	%
Diesel	1-3	%
Water	5-10	%

#### **SECTION 5: Safety Related Data**

If the handling of this material / product requires the use of special protective equipment, please explain.  
Level D PPE

#### **SECTION 6: Attached Supporting Documents**

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.  
None-Generator knowledge

#### **SECTION 7: Incompatibilities**

Please list all incompatibilities (if any):  
Oxidizers

#### **SECTION 8: Material Producer's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Stephen A. Stinson Date: 10-29-08  
Printed Name/Title: Stephen A. Stinson

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: <u>Rebecca</u>	
Date: <u>10-29-08</u> Approved Rejected	
Approval Number: <u>2947</u>	



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

\$50/YD Class 1 Solid  
Trans \$70/hr

**2. Contamination Limits (maximum limit before surcharges apply):**

Not conforming to profile  
or Analysis dictates otherwise

**3. Surcharge Pricing:**

If wet \$65/yd

**4. Special Testing Requirements:**

Flash

**5. Treatment and Handling Protocol:**

Hold for results of outside lab analysis to go to HPP  
After results are received forward to HPP under CES General Profile  
Trans to HPP should be billed to customer

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☐ Subcategory B

☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**7. Tests for Product Recovered/Recycled (if applicable):**

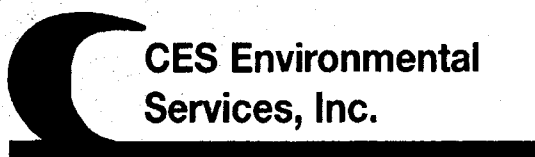
Na

**8. Management for Product Recovered/Recycled (if applicable):**

Na

2948

Letourneau Technologies



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 8/22/2008

Dear Keith Hoyer

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2948

**Expiration Date** 8/22/2010

**Generator:** Letourneau Technologies

**Address:** 6401 West Sam Houston Parkway  
Houston, TX 77041

### Waste Information

**Name of Waste:** oil filters

**TCEQ Waste Code #:** Recycle

**Container Type:**

**Detailed Description of Process Generating Waste:**

spent oil filters from equipment fluid changes

**Color:** various

**Odor:** oil like

**pH:** neutral

**Physical State:**

**Incompatibilities:** strong oxidizers

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000561

6B



4904 Griggs Road, Houston, TX 77021  
 Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>  
 TCEQ Industrial Solid Waste Permit Number: 30948  
 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

**SECTION 1: Generator Information**

Company: Letourneau Technologies  
 Address: 6401 West Sam Houston Parkway  
 City: Houston State: TX Zip: 77041  
 Contact: Keith Hoyer Title:  
 Phone Number: (832) 782-6655 Fax Number: (832) 782-6638  
 24/hr Phone Number: (713) 205-7297  
 US EPA ID No: TXCEQSG  
 State ID No: CESQG SIC Code:

**SECTION 2: Billing Information - ☒ Same as Above**

Company:  
 Address:  
 City: State: Zip:  
 Contact: Title:  
 Phone Number: Fax Number:

**SECTION 3: General Description of the Waste**

Name of Waste: Oil Filters

Detailed Description of Process Generating Waste:

Spent oil filters from equipment fluid changes.

Physical State: ☐ Liquid ☐ Sludge ☐ Powder  
☒ Solid ☐ Filter Cake ☐ Combination

Color: various Odor: oil like

Specific Gravity (water=1): na Density: na lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ NoDoes this material contain any para substituted phenolic compounds? ☐ Yes ☒ NoIs the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phaseContainer Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)Frequency: ☐ Weekly ☒ Monthly ☐ Yearly ☐ One-Time

Quantity: 1 drum

EPAHO106000562

☐ Yes ☒ No

**If “Yes”, Is it:**

☐ D002 (Corrosive)☐ D003 (Reactive)

☐ D004

☐ D005

☐ D006

☐ D007☐ D008

☐ D009

☐ D010

☐ D011

**Texas State Waste Code Number:**

Recycle

Non RCRA Non DOT regulated material (oil filters)

**Class:** na

UN/NA:

---

na

**PG :**

na

**RQ:**

na

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>140		neutral		0 <u>mg/l</u>		0 <u>mg/l</u>		100 <u>%</u>	
Oil & Grease		TOC		Zinc		Copper		Nickel	
>1500	<u>mg/l</u>	>1500	<u>mg/l</u>	0	<u>mg/l</u>	0	<u>mg/l</u>	0	<u>mg/l</u>

[illegible]

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

Standard

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.

none

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

strong oxidizers

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	x
TCLP Volatiles:	x
TCLP Semi-Volatiles:	x
Reactivity:	x
Corrosivity:	x
Ignitability:	x

**SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)**

Is this material a wastewater or wastewater sludge?

☐ YES

☒ NO

If 'Yes', complete this section.

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.**

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory : Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

**SECTION 10 Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.


**SECTION 11: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name/Title: \_\_\_\_\_

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Compliance Officer: 	
Date: 8-22-08	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Rejected
Approval Number: 2948	



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**1. Base Pricing (including freight):**

\$35/dm  
TRANS \$70/hr + FSC

**2. Contamination Limit (maximum limit before surcharges apply):**

**3. Surcharge Pricing:**

**4. Special Testing Requirements:**

**5. Treatment and Handling Protocol:**

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A    ☐ Subcategory B    ☐ Subcategory C

2949

Green Hunter Biofuels



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 8/22/2008

Dear Steve Sams

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2949

**Expiration Date** 8/22/2010

**Generator:** Green Hunter Biofuels

**Address:** 13605 Industrial Blvd  
Houston, TX 77015

### Waste Information

**Name of Waste:** methanol washwater

**TCEQ Waste Code #:** CESQ1011

**Container Type:**

**Detailed Description of Process Generating Waste:**

waswater generated from the production of biodiesel in the methanol washout step

**Color:** brown

**Odor:** alcohol

**pH:** 4-11

**Physical State:**

**Incompatibilities:** oxidizers

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000568

GRP



4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
http://www.cesenvironmental.com

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

JB

**SECTION 1: Generator Information**

Company: Green Hunter Biofuels  
Address: 13605 Industrial Blvd  
City: Houston State: TX Zip: 77015  
Contact: Terry Wilson Title: \_\_\_\_\_  
Phone Number: 713-574-9529 Fax Number: 713-568-4444  
24/hr Phone Number: 832-331-7477  
US EPA ID No: \_\_\_\_\_  
State ID No: \_\_\_\_\_ SIC Code: \_\_\_\_\_

**SECTION 2: Billing Information -**

☐ Same as Above

Company: Phoenix Pollution Control  
Address: 720 S. Lynchburg Rd  
City: Baytown State: TX Zip: 77520  
Contact: Steve Sams Title: \_\_\_\_\_  
Phone Number: 713-530-4550 Fax Number: \_\_\_\_\_

**SECTION 3: General Description of the Waste**

Name of Waste: Methanol Washwater

Detailed Description of Process Generating Waste:

Washwater generated from the production of biodiesel in the methanol washout step

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: brown Odor: alcohol

Specific Gravity (water=1): 0.95-1.05 Density: 7.9-8.8 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)

Frequency: ☒ Weekly ☐ Monthly ☐ Yearly ☐ One-Time

Quantity: 25,000 gal

**Is this a USEPA "Hazardous Waste" per 40CFR 261.3?**

☐ Yes ☒ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

**If “Yes”, Is it:**

☐ D001 (Ignitable)☐ D002 (Corrosive)☐ D003 (Reactive)

**Characteristic for Toxic Metals:**

☐ D004

☐ D005☐ D006

☐ D007

☐ D008

☐ D009

☐ D010

☐ D011

**Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)**

**Is this an "F" or "K" Listed waste or mixed with one?**

☐ Yes ☒ No

**If "Yes", then please list ALL applicable codes:**

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No

☐ Yes☐ No

If "Yes", then please list ALL applicable codes:

**Texas State Waste Code Number:**

CE5Q 1011. \_\_\_\_ \*

**Proper US DOT Shipping Name:**

Non-RCRA / Non-DOT regulated Wastewater (alcohol exempt)

Class: N/A UN/NA:

N/A

UN/NA:

N/12

**PG :**

Nh

**RQ:**

N/A

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
210		4-11		N/A mg/l		N/A mg/l		21 %	
Oil & Grease		TOC		Zinc		Copper		Nickel	
1500 mg/l		25000 mg/l		N/A mg/l		N/A mg/l		N/A mg/l	

#### **SECTION 4:** Physical and Chemical Data

[illegible]

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

Oxidizers

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:

N/A

TCLP Volatiles:

N/A

TCLP Semi-Volatiles:

N/A

Reactivity:

N/A

Corrosivity:

N/A

Ignitability:

N/A

**SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)**

Is this material a wastewater or wastewater sludge?



YES



NO

If 'Yes', complete this section.

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.**

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☒ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☒ Organics Subcategory

**SECTION 10 Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

**SECTION 11: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_

Date: 08-22-08

Printed Name/Title: \_\_\_\_\_

STEVE SAMS / Auth. Broker For Generator

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: \_\_\_\_\_

Date: 8-22-08

☒ Approved

☐ Rejected

Approval Number: \_\_\_\_\_

2949

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. Base Pricing (including freight):

\$0.10/gal

2. Contamination Limits (maximum limit before surcharges apply):

< 10,000 TOC, std

3. Surcharge Pricing:

\$0.05/gal / 5000 TOC in excess of 10000  
up to \$0.30 /gal

4. Special Testing Requirements:

flash, TOC, metals - If TOC charges exceed the base rate  
just generate an inbound for \$0.30/gal to go to Sys. 1. Generate  
an inbound also for any other surcharges.

5. Treatment and Handling Protocol:

if flash and TOC can be diluted and treated  
to economically process at CES, then do so.  
if not, process to System 1.

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A

☐ Subcategory B

☒ Subcategory C

**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**7. Tests for Product Recovered/Recycled (if applicable):**

--

**8. Management for Product Recovered/Recycled (if applicable):**

--

2953

Telsa Power & Automation



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 8/25/2008

Dear **Frank Baker**

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2953

**Expiration Date** 8/25/2010

**Generator:** Telsa Power & Automation

**Address:** 6510 Bourgeois Road  
Houston, TX 77066

### Waste Information

**Name of Waste:** empty drums

**TCEQ Waste Code #:** Recycle

**Container Type:**

**Detailed Description of Process Generating Waste:**

RCRA empty unused drums

**Color:** varies

**Odor:** none

**pH:** na

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000576



4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

GB

**SECTION 1: Generator Information**

Company: Tesla Power  
Address: 6510 Bourgeois  
City: Houston State: Tx Zip: 77066  
Contact: Frank Baker Title:  
Phone Number: (281) 444-1200 Fax Number: (281) 444-1290  
24/hr Phone Number: (281) 444-1200  
US EPA ID No:  
State ID No: 85227 SIC Code: na

**SECTION 2: Billing Information - ☒ Same as Above**

Company:  
Address:  
City: State: Zip:  
Contact: Title:  
Phone Number: Fax Number:

**SECTION 3: General Description of the Waste**

Name of Waste: Empty drums

Detailed Description of Process Generating Waste:

RCRA empty unused drums

Physical State: ☐ Liquid ☐ Sludge ☐ Powder  
☒ Solid ☐ Filter Cake ☐ Combination

Color: varies Odor: none

Specific Gravity (water=1): na Density: na lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☒ Yearly ☐ One-Time

Quantity: 20

EPAHO106000577

☐ Yes ☒ No

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)  
 Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009  
☐ D010 ☐ D011

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☒ No

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No

**Texas State Waste Code Number:** Recycle

**Class:** \_\_\_\_\_ **UN/NA:** \_\_\_\_\_ **PG :** \_\_\_\_\_ **RQ:** \_\_\_\_\_

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
na		na		0 <u>mg/l</u>		0 <u>mg/l</u>		100 %	
Oil & Grease		TOC		Zinc		Copper		Nickel	
0	<u>mg/l</u>	0	<u>mg/l</u>	0	<u>mg/l</u>	0	<u>mg/l</u>	0	<u>mg/l</u>

[illegible]

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

Standard \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. none

\_\_\_\_\_

\_\_\_\_\_

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

none known

\_\_\_\_\_

\_\_\_\_\_

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	<u>x</u>
TCLP Volatiles:	<u>x</u>
TCLP Semi-Volatiles:	<u>x</u>
Reactivity:	<u>x</u>
Corrosivity:	<u>x</u>
Ignitability:	<u>x</u>

**SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)**

Is this material a wastewater or wastewater sludge?

☐ YES ☒ NO

If 'Yes', complete this section.

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.**

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

**SECTION 10 Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.


**SECTION 11: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name/Title: \_\_\_\_\_

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Compliance Officer: 	
Date: 8-25-08	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Rejected
Approval Number: 2953	



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**1. Base Pricing (including freight):**

\$15/drup  
TRANS \$70 + FSC

**2. Contamination Limit (maximum limit before surcharges apply):**

**3. Surcharge Pricing:**

**4. Special Testing Requirements:**

**5. Treatment and Handling Protocol:**

Recycle

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A    ☐ Subcategory B    ☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**7. Tests for Product Recovered/Recycled (if applicable):**

--

**8. Management for Product Recovered/Recycled (if applicable)**

--

2954

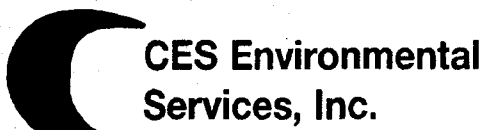
Kopper, Inc

7E

8-4-09

T-35

LAB



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 8/25/2008

Dear David Shaw

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # 2954

Expiration Date 8/25/2010

Generator: Koppers, Inc.

Address: PO Box 189  
Somerville, TX 77879

### Waste Information

Name of Waste: Fluorescent and metal halide bulbs and lamps (univ. waste)

TCEQ Waste Code #: UNIV309H

Container Type: box

Detailed Description of Process Generating Waste:

Spent fluorescent and metal halide bulbs and lamps

Color: white to clear

Odor: none

pH: na

Physical State:

Incompatibilities: none

Safety Related Data/Special Handling:

level d

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000585



4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

**SECTION 1: Generator Information**

Company: Koppers, Inc.  
Address: PO Box 189  
City: Somerville State: Texas Zip: 77879  
Contact: David R. Lauter Jr. Title: Safety Health & Environmental Coordinator  
Phone Number: (979) 596-1321 Fax Number: 979-596-2719  
24/hr Phone Number: 936-520-9597  
US EPA ID No: TXR000003780  
State ID No: 83899 SIC Code: N/A

**SECTION 2: Billing Information - ☐ Same as Above**

Company: Koppers, Inc.  
Address: PO Box 189  
City: Somerville State: Texas Zip: 77879  
Contact: David Shaw Title:  
Phone Number: (979) 596-1321 Fax Number:

**SECTION 3: General Description of the Waste**

Name of Waste: Fluorescent and Metal Halide bulbs and lamps (Universal Waste)

Detailed Description of Process Generating Waste:

Spent Fluorescent and Metal Halide bulbs and lamps

Physical State: ☐ Liquid ☐ Sludge ☐ Powder  
☒ Solid ☐ Filter Cake ☐ Combination

Color: White to Clear Odor: None

Specific Gravity (water=1): N/A Density: N/A lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ NoDoes this material contain any para substituted phenolic compounds? ☐ Yes ☒ NoIs the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phaseContainer Type: ☐ Drum ☐ Tote ☐ Truck ☒ Other (explain)Frequency: ☐ Weekly ☐ Monthly ☒ Yearly ☐ One-Time

Quantity: 3 boxes

Pricing  
50¢/4' Bulbs  
75¢/5-8' Bulbs  
Trans 70¢/hr  
+ FSC

☒ Yes ☒ No

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)  
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☒ D009  
☐ D010 ☐ D011

EPAHQ106000587

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

Level D

**SECTION 6: Attached Supporting Documents**List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. None**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

None**SECTION 8: Generator's Knowledge Documentation**Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:TCLP Metals: XTCLP Volatiles: XTCLP Semi-Volatiles: XReactivity: XCorrosivity: XIgnitability: X**SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)**

Is this material a wastewater or wastewater sludge?

☐ YES☒ NO

If 'Yes', complete this section.

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.****Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

**SECTION 10 Additional Instructions**

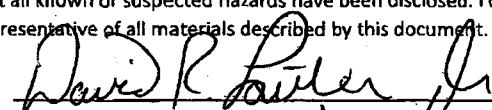
If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

**SECTION 11: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature:



Date:

8/25/08

Printed Name/Title:

David R. Lauter Jr.

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer:



Date:

8-25-08

☒ Approved☐ Rejected

Approval Number:

2954

2932  
Rolled Alloys



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 8/19/2008

Dear Larry Torres, Eduardo Gracia

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2932

**Expiration Date** 8/19/2010

**Generator:** Rolled Alloys

**Address:** 9818 E. Hardy Rd.  
Houston, TX 77093

### Waste Information

**Name of Waste:** Cutting sand and water sludge from water jet blasting booth

**TCEQ Waste Code #:** CESQ5192

**Container Type:**

**Detailed Description of Process Generating Waste:**

sand and garnet are used in hydroblasting with high pressure to cut various forms of steel

**Color:** brown

**Odor:** tan

**pH:** 8.55

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000591

AUG-15-2008 14:25

CES Environmental Service

713 676 1676 P.01

JP

CES Environmental  
Services, Inc.4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

GB

**SECTION 1: Generator Information**

Company: Rolled Alloys  
Address: 9818 East Hardy Road  
City: Houston State: TX Zip: 77093  
Contact: Eduardo Gracia Title: \_\_\_\_\_  
Phone Number: 832.865.1063 Fax Number: \_\_\_\_\_  
24/hr Phone Number: 713.676.1460  
US EPA ID No: TXCESQG  
State ID No: CESQG SIC Code: \_\_\_\_\_

**SECTION 2: Billing Information - ☒ Same as Above**

Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Contact: \_\_\_\_\_ Title: \_\_\_\_\_  
Phone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_

**SECTION 3: General Description of the Waste**Name of Waste: Cutting sand and water sludge from water jet blasting booth

Detailed Description of Process Generating Waste:

Sand and Garnet are used in hydroblasting with high pressure to cut various forms of steel.

Physical State: ☐ Liquid ☒ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: Brown / tan Odor: noneSpecific Gravity (water=1): na Density: na lbs/galDoes this material contain any total phenolic compounds? ☐ Yes ☒ NoDoes this material contain any para substituted phenolic compounds? ☐ Yes ☒ NoIs the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phaseContainer Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)Frequency: ☐ Weekly ☒ Monthly ☐ Yearly ☐ One-TimeQuantity: 50 yards

P.02

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

**D011**

**Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)**

**If "Yes", then please list ALL applicable codes:**

If "Yes", then please list ALL applicable codes:

**CESQ5192**

Non RCRA Non DOT Regulated material (Cutting Sand)

Na

AUG-15-2008 14:26

CES Environmental Service

713 676 1676

P.03

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

Standard

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. analysis

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

None Known

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals:

TCLP Volatiles:

TCLP Semi-Volatiles:

Reactivity:

Corrosivity:

Ignitability:

**SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)**

Is this material a wastewater or wastewater sludge?

If 'Yes', complete this section.

☒ YES☐ NO

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☒ Organics Subcategory

**SECTION 10: Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

**SECTION 11: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☒ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Printed Name/Title: \_\_\_\_\_

EDUARDO GARCIA

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: \_\_\_\_\_

Date: \_\_\_\_\_

Approval Number: \_\_\_\_\_

☒ Approved☐ Rejected

AUG-15-2008 14:26

CES Environmental Service

713 676 1676

P.05

Aug 13 05 08:14a

Southwest Transfer Station

713-923-2109

04/12/2005 15:23

-2614754406

NES

Page 01

**Mercury Environmental Services, Inc.**

6913 HWY 225, Deer Park, TX 77556

Phone: (281) 476-4534 Fax: (281) 476-4534

Republic Services Inc.

PO Box 567

10310 FM 523

Angleton, TX 77516

Attn: Stu Leonhart

Phone 7135391405

Fax 7139232109

**- CERTIFICATE OF RESULTS -**

NES Label: 5020173

Client Sample ID: Water Table Jet Sludge

Extended ID: Rolled Alloys @ 9818 E. Hardy Road, Houston, TX 77093

Sample Collect Date: 2/8/2005 @ 1:30:00 PM

Sample Type: Comp

Sample Receipt Date: 2/8/2005 @ 2:25:00 PM

**Test Group / Method**

Total Petroleum Hydrocarbons Solid Method: TNRGC 1005	MDL	Result	Units	Analyst: TFR Date / Time
C6 - C12 Hydrocarbons	4	< 4	mg/kg	2/10/2005 / 6:09 AM
>C12 - C28 Hydrocarbons	8	< 8	mg/kg	2/10/2005 / 6:09 AM
>C28 - C38 Hydrocarbons	8	< 8	mg/kg	2/10/2005 / 6:09 AM
Total TPH	20	< 20	mg/kg	2/10/2005 / 6:09 AM

TCLP Metals (8) Method: SW-846 60108	MDL	RL	Result	Units	Analyst: AM Date / Time
Antimony	0.032		< 0.032	mg/L	2/11/2005 / 3:47 PM
Arsenic	0.050	5	< 0.050	mg/L	2/11/2005 / 3:47 PM
Barium	0.002	100	1.00	mg/L	2/11/2005 / 3:47 PM
Beryllium	0.005		0.006	mg/L	2/11/2005 / 3:47 PM
Cadmium	0.004	1	< 0.004	mg/L	2/11/2005 / 3:47 PM
Chromium	0.007	5	0.006	mg/L	2/11/2005 / 3:47 PM
Lead	0.010	5	< 0.010	mg/L	2/11/2005 / 3:47 PM
Nickel	0.006		0.032	mg/L	2/11/2005 / 3:47 PM
Selenium	0.050	1	< 0.050	mg/L	2/11/2005 / 3:47 PM
Silver	0.006	5	< 0.006	mg/L	2/11/2005 / 3:47 PM

TCLP Mercury Method: SW-846 7470A	MDL	RL	Result	Units	Analyst: AM Date / Time
Mercury	0.005	0.2	< 0.005	mg/L	2/11/2005 / 4:17 PM

Corrosivity: pH Method: SW-846 8046	MDL	Result	Units	Analyst: RL Date / Time
pH		8.55		2/8/2005 / 4:30 PM

Report Date: 12-Apr-05

Page 1 of 2

AUG-15-2008 14:27

CES Environmental Service

04/12/2008 15:23 -2014764406 MES 713-823-2109

PAGE 01

5020173

MERCURY ENVIRONMENTAL SERVICES  
QA/QC REPORT

ANALYTES	METHOD TPH1006	MB mg/kg	CCV %REC	MS %REC	MSD %REC
C5-C12		< 4	99.8	83.1	84.9
C12-C28		< 8	110.8	100.7	105.5

ANALYTE	BUFFER 7.0	ORIG	DUP	RPD
pH	7.0	6.95	7.02	1.0

ANALYTE	MB mg/L	LCS %REC	LCS0 %REC	RPD	CCB mg/L	CCV %REC
Antimony	< 0.002	99.0	96.0	3.08	< 0.032	100.0
Arsenic	< 0.005	96.0	106.5	10.37	< 0.005	102.0
Barium	< 0.002	109.3	104.5	4.87	< 0.002	98.9
Beryllium	< 0.005	96.6	98.0	2.58	< 0.003	102.0
Cadmium	< 0.004	101.5	93.5	8.21	< 0.004	86.7
Chromium	< 0.007	103.0	110.0	6.57	< 0.007	98.7
Lead	< 0.010	97.5	107.3	3.77	< 0.010	97.1
Mercury	< 0.0002	101.5	99.5	1.99	< 0.0002	102.0
Nickel	< 0.015	103.0	105.3	3.34	< 0.015	106.0
Selenium	< 0.005	92.8	110.8	17.68	< 0.005	97.5
Silver	< 0.005	100.0	88.0	12.77	< 0.005	97.3

## Key to QA Abbreviations

MS=Matrix Spike  
MSD=Matrix Spike Duplicate  
RPD=Relative Percent Deviation  
MB=Method Blank

LCS=Laboratory Control Standard  
CCV=Continuing Calibration Verification  
CCB=Continuing Calibration Blank  
Rec=Percent Recovery

Signature: 

Holland D. Gilmore / Laboratory Director

April 12, 2005

Mercury Environmental Services, Inc.

AUG-15-2008 14:27

CES Environmental Service

713 676 1676

P.07


Apr 13 08 08:14a  
04/12/2005 15:23Southeast Transfer Station 713-923-2109  
-2814764406 MES

PAGE 02

## - CERTIFICATE OF RESULTS -

MES Lab#: 5020173  
Client Sample ID: Water Tower Jet Sludge  
Extended ID: Rolled Alloys @ 9818 E. Hardy Road, Houston, TX 77023  
Sample Collect Date: 2/8/2005 @ 1:30:00 PM Sample Type: Comp  
Sample Receipt Date: 2/8/2005 @ 2:25:00 PM

Flags: H: Exceeds "High Limit" L: Below "Low Limit" RL: Regulatory Limit

  
Holland D. Gilmore, Laboratory DirectorTuesday, April 12, 2005  
Date





PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

65/GAL  
\$70/hr TRANS + FSC

2. Contamination Limit (maximum limit before surcharges apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

pH + Flash point if there are free liquids.

5. Treatment and Handling Protocol:

Redirect to Republic AS CLASS 2 Solid

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A    ☐ Subcategory B    ☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**7. Tests for Product Recovered/Recycled (if applicable):**

--

**8. Management for Product Recovered/Recycled (if applicable)**

--

2933  
Magellan



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 8/19/2008

Dear Mike Savoy

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2933

**Expiration Date** 8/19/2010

**Generator:** Magellan

**Address:** 7901 Wallisville Rd.  
Houston, TX 77029

### Waste Information

**Name of Waste:** Hydrocarbon and water mixture

**TCEQ Waste Code #:** Recycle

**Container Type:**

**Detailed Description of Process Generating Waste:**

Jet A and water from cleaning an underground storage tank

**Color:** clear to black

**Odor:** hydrocarbon

**pH:** 5-9

**Physical State:**

**Incompatibilities:** oxidizers

**Safety Related Data/Special Handling:**

level C ppe

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000603



**CES Environmental  
Services, Inc.**

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
http://www.cesenvironmental.com  
TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

DB

**SECTION 1: Material Producer Information**

Company: Magellen Midstream Partners  
Address: 7901 Wallisville Rd.  
City, State, Zip: Houston, TX 77029  
Contact: Mike Savoy Title: Agent for Generator  
Phone No: 713-264-2629 Fax No: 713-933-0608  
24/hr Phone: 281-838-5093  
U.S. EPA I.D. No: NA  
State I.D. NA SIC Code:

**SECTION 2: Billing Information – ☐ Same as Above**

Company: One Source Industrial  
Address: 200 South 16<sup>th</sup> Street  
City, State, Zip: Laporte, TX 77571  
Contact: Mike Savoy Title: Agent for generator  
Phone No: 281-838-5093 Fax No: 281-867-9032

**SECTION 3: General Description of the Material / Product**

Name of Material / Product: Hydrocarbon and Water Mixture

Detailed Description of Process Generating or Producing the Material / Product: Jet A and water from cleaning an underground storage tank.

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: Clear to Black Odor: Hydrocarbon

Specific Gravity (water=1): 7-9 Density: 7-8 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☐ Single-phase ☒ Multi-phase

Container Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)  
Container Size: 3000 Gal

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☒ Yearly  
Number of Units (containers): 1 Other: \_\_\_\_\_

Proper U.S. DOT Shipping Name: Recyclable Hydrocarbon and Water Mixture

Class: Na UN/NA: Na PG: Na RQ: Na

Flash Point <u>7140</u>	pH <u>5-9</u>	N/A	N/A	Solids <u>0-10%</u>
Oil & Grease <u>&gt;1500mg/l</u>	TOC <u>10,200</u> mg/l	Zinc <u>Namg/l</u>	Copper <u>Namg/l</u>	Nickel <u>Namg/l</u>

#### SECTION 4: Physical and Chemical Data

COMPONENTS TABLE		Concentration	Units
The material / product consists of the following materials		Ranges are acceptable	or %
Jet A (Fuel)		<u>5-35</u> <u>50</u>	%
Water		50-95	%
Debris (Dirt and Rock)		0-10	%

#### SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.

Level C PPE

#### SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.

None-Generator Knowledge-Internal Lab Testing

#### SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

Oxidizers

#### SECTION 8: Material Producer's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: *Ricky Hall*

Date: 08/19/08

Printed Name/Title: Ricky Hall Senior Operator

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: <u><i>Robert Ryan</i></u>	
Date: <u>8-19-08</u>	Approved <input checked="" type="checkbox"/> Rejected <input type="checkbox"/>
Approval Number: <u>2933</u>	



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

35/gal

**2. Contamination Limits (maximum limit before surcharges apply):**

only surcharge if TOC > 70,000

**3. Surcharge Pricing:**

CALL DAN

**4. Special Testing Requirements:**

Flash, phenols, metals  
% Solids, % Water, %Hydrocarbon  
TOC on water phase, phenols, pH, metals

**5. Treatment and Handling Protocol:**

Recycle as light end for the Hydrocarbon portion  
Dispose Solids-Class 1  
Dispose Water through waste water treatment facility

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A    ☒ Subcategory B    ☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**7. Tests for Product Recovered/Recycled (if applicable):**

Light End Compatibility

**8. Management for Product Recovered/Recycled (if applicable):**

Light Ends

2934

Weingarten at citadel



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 8/19/2008

Dear Zac or Dave

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2934

**Expiration Date** 8/19/2010

**Generator:** Weingarten at Citadel

**Address:** 2600 Citadel Plaza Drive  
Houston, TX 77008

### Waste Information

**Name of Waste:** Water

**TCEQ Waste Code #:** CESQ2191

**Container Type:**

**Detailed Description of Process Generating Waste:**

Sampling wells - for any kind of contamination in water, mainly dry cleaners

**Color:** na

**Odor:** none

**pH:** na

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

*SP*  
We do not recycle water.  
~~REJECT~~



**CES Environmental  
Services, Inc.**

4904 Griggs Road, Houston, TX 77021

Phone: (713) 676-1460

Fax: (713) 676-1676

<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461

ISWR Number: 30900

**SECTION 1: Generator Information**

Company: WEINGARTEN REALTY INVESTORS

Address: 2600 CITADEL PLAZA DRIVE

City: HOUSTON

State: TX

Zip: 77008

Contact: CHUCK GURNEY

Title: \_\_\_\_\_

Phone Number: 713-866-8855

Fax Number: 713-866-6066

24/hr Phone Number: 281-541-4829

US EPA ID No: TXCESQG

State ID No: CESQG

SIC Code: \_\_\_\_\_

**SECTION 2: Billing Information - ☐ Same as Above**

Company: CKG SERVICES

Address: 10707 HONEA EGYPT RIAD

City: MONTGOMERY

State: TX

Zip: 77316

Contact: JAMIE BADER

Title: AP

Phone Number: 936-483-3662

Fax Number: 936-756-1226

**SECTION 3: General Description of the Waste**

Name of Waste: WATER

Detailed Description of Process Generating Waste: \_\_\_\_\_

SAMPLING WELLS - for any kind of

contamination in water, mainly dry cleaners

Physical State: ☒ Liquid  
☐ Solid

☐ Sludge  
☐ Filter Cake

☐ Powder  
☐ Combination

Color: NA

Odor: NONE

Specific Gravity (water=1): NA

Density: NA 8.34 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☒ Yearly ☒ One-Time

Quantity: 6

Is this a USEPA "Hazardous Waste" per 40CFR 261.3?

☐ Yes

☒ No

If "Yes", then please fill out the UHC Form

**Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)**

If "Yes", then please list ALL applicable codes:

**If "Yes", then please list ALL applicable codes:**

CE5021A1

**RQ:**

<b>Flash Point</b>		<b>pH</b>		<b>Reactive Sulfides</b>		<b>Reactive Cyanides</b>		<b>Solids</b>	
NA		NA		NA <u>mg/l</u>		NA <u>mg/l</u>		NA <u>%</u>	
<b>Oil &amp; Grease</b>		<b>TOC</b>		<b>Zinc</b>		<b>Copper</b>		<b>Nickel</b>	
NA	<u>mg/l</u>	NA	<u>mg/l</u>	NA	<u>mg/l</u>	NA	<u>mg/l</u>	NA	<u>mg/l</u>

#### **SECTION 4: Physical and Chemical Data**

[illegible]

## **SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

ANALYTICAL

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.

*analysis*

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

None Known

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	0
TCLP Volatiles:	0
TCLP Semi-Volatiles:	0
Reactivity:	0
Corrosivity:	0
Ignitability:	0

**SECTION 9: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature:

Date:

*8/12/08*

Printed Name/Title:

*BAR MCKAUGHAN / PRESIDENT*

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer:

Date: *8-19-08*

☒ Approved

☐ Rejected

Approval Number:

*2934*

**SECTION 10: Waste Receipt Classification Under 40 CFR 437**

Is this material a wastewater or wastewater sludge?  
If 'Yes', complete this section.

☒ YES

☒ NO

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

\$65/dm

**2. Contamination Limits (maximum limit before surcharges apply):**

Non-Conforming-Reject

**3. Surcharge Pricing:**

None

**4. Special Testing Requirements:**

None

**5. Treatment and Handling Protocol:**

Class 1 liquids/Sludge

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☐ Subcategory B

☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**7. Tests for Product Recovered/Recycled (if applicable):**

Na

**8. Management for Product Recovered/Recycled (if applicable):**

Na

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

JOB NUMBER: 356282

Project ID: PALMER PLAZA 208119

Prepared For:

Buchanan Environmental Associates

P.O. BOX 14634

Humble, TX 77347-4634

Attention: David Buchanan

Date: 07/09/2008

  
Signature

Name: Jodi L. Allen

Title: Project Manager II

E-Mail: jodi.allen@testamericainc.com

  
Date

TestAmerica Laboratories, Inc  
6310 Rothway Drive  
Houston, TX 77040

PHONE: 713-690-4444

TOTAL NO. OF PAGES 30

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

07/09/2008

David Buchanan  
Buchanan Environmental Associates  
P.O. BOX 14634  
Humble, TX 77347-4634

**Reference:**

Project : PALMER PLAZA 208110  
Project No. : 356283  
Date Received : 06/27/2008  
TestAmerica Job : 356283

Dear David Buchanan:

Enclosed are the analytical results for your project referenced above. The following samples are included in the report.

1. MW-1
2. MW-2
3. MW-3
4. TRIP BLANK

All holding times were met for the tests performed on these samples.

Enclosed, please find the Quality Control Summary. All quality control results for the QC batch that are applicable to the sample(s) are acceptable except as noted in the QC batch reports.

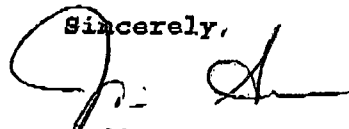
The test results in this report meet all NELAP requirements for TestAmerica Houston's NELAP accredited parameters. Any exceptions to the NELAP requirements will be flagged accordingly and where applicable, included in a case narrative as a part of this report.

If the report is acceptable, please approve the enclosed invoice and forward it for payment.

Thank you for selecting TestAmerica to serve as your analytical laboratory on this project. If you have any questions concerning these results, please feel free to contact me at any time.

We look forward to working with you on future projects.

Sincerely,



Jodi L. Allen  
Project Manager

Table 1

Cross Reference Lab Identifications, Field Identifications, and Methods

Lab Identification	Field Identification	SW-846 8260B
356283-001	MW-1	1
356283-002	MW-2	1
356283-003	MW-3	1

## Appendix A Laboratory Data Package Cover Page

This data package consists of:

- ☒ This signature page, the laboratory review checklist, and the following reportable data:
- ☒ R1 Field chain-of-custody documentation;
- ☒ R2 Sample identification cross-reference;
- ☒ R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
  - b) dilution factors,
  - c) preparation methods,
  - d) cleanup methods, and
  - e) if required for the project, tentatively identified compounds (TICs).
- ☒ R4 Surrogate recovery data including:
  - a) Calculated recovery (%R), and
  - b) The laboratory's surrogate QC limits.
- ☒ R5 Test reports/summary forms for blank samples;
- ☒ R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - a) LCS spiking amounts,
  - b) Calculated %R for each analyte, and
  - c) The laboratory's LCS QC limits.
- ☒ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - a) Samples associated with the MS/MSD clearly identified,
  - b) MS/MSD spiking amounts,
  - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  - d) Calculated %Rs and relative percent differences (RPDs), and
  - e) The laboratory's MS/MSD QC limits
- ☒ R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - a) the amount of analyte measured in the duplicate,
  - b) the calculated RPD, and
  - c) the laboratory's QC limits for analytical duplicates.
- ☒ R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
- ☒ R10 Other problems or anomalies.
- ☒ The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

**Release Statement:** I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

**Check, if applicable:** ☐ This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Craig Bromley  
Name (Printed)

Signature

Laboratory Director  
Official Title (printed)

7/10/2008  
Date

# Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: TestAmerica-Houston		LRC Date: 07/09/08						
Project Name: PALMER PLAZA 208110		Laboratory Job Number: 356283						
Reviewer Name: YX		Prep Batch Number(s): 400985 and 401071-VOA						
# <sup>1</sup>	A <sup>2</sup>	Description	Yes	No	NA <sup>3</sup>	NR <sup>4</sup>	ER# <sup>5</sup>	
R1	OI	Chain-of-custody (C-O-C)						
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?		X				1
		Were all departures from standard conditions described in an exception report?	X					
R2	OI	Sample and quality control (QC) identification						
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X					
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X					
R3	OI	Test reports						
		Were all samples prepared and analyzed within holding times?	X					
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X					
		Were calculations checked by a peer or supervisor?	X					
		Were all analyte identifications checked by a peer or supervisor?	X					
		Were sample quantitation limits reported for all analytes not detected?	X					
		Were all results for soil and sediment samples reported on a dry weight basis?			X			
		Were % moisture (or solids) reported for all soil and sediment samples?			X			
R4	O	Surrogate recovery data						
		Were surrogates added prior to extraction?	X					
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X					
R5	OI	Test reports/summary forms for blank samples						
		Were appropriate type(s) of blanks analyzed?	X					
		Were blanks analyzed at the appropriate frequency?	X					
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X					
		Were blank concentrations < MQL?	X					
R6	OI	Laboratory control samples (LCS):						
		Were all COCs included in the LCS?	X					
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X					
		Were LCSs analyzed at the required frequency?	X					
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X					
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	X					
		Was the LCSD RPD within QC limits?			X			
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data						
		Were the project/method specified analytes included in the MS and MSD?	X					
		Were MS/MSD analyzed at the appropriate frequency?	X					
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?				X		2
		Were MS/MSD RPDs within laboratory QC limits?				X		2
R8	OI	Analytical duplicate data						
		Were appropriate analytical duplicates analyzed for each matrix?			X			
		Were analytical duplicates analyzed at the appropriate frequency?			X			
		Were RPDs or relative standard deviations within the laboratory QC limits?			X			
R9	OI	Method quantitation limits (MQLs):						
		Are the MQLs for each method analyte included in the laboratory data package?	X					
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X					
		Are unadjusted MQLs included in the laboratory data package?	X					
R10	OI	Other problems/anomalies						
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X					
		Were all necessary corrective actions performed for the reported data?	X					
		Was applicable and available technology used to lower the SQL to minimize the matrix interference affects on the sample results?	X					3

- Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
- organic analyses; I = inorganic analyses (and general chemistry, when applicable);
- NA = Not applicable;
- NR = Not reviewed;
- ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data									
Laboratory Name: TestAmerica-Houston					LRC Date: 07/09/08				
Project Name: PALMER PLAZA 208110					Laboratory Job Number: 356283				
Reviewer Name: YX					Prep Batch Number(s): 400985 and 401071-VOA				
# <sup>1</sup>	A <sup>2</sup>	Description	Yes	No	NA <sup>3</sup>	NR <sup>4</sup>	ER <sup>5</sup>		
S1	OI	Initial calibration (ICAL)							
		Were response factors and/or relative response factors for each analyte within QC limits?	X						
		Were percent RSDs or correlation coefficient criteria met?	X						
		Was the number of standards recommended in the method used for all analytes?	X						
		Were all points generated between the lowest and highest standard used to calculate the curve?	X						
		Are ICAL data available for all instruments used?	X						
		Has the initial calibration curve been verified using an appropriate second source standard?	X						
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration							
		Was the CCV analyzed at the method-required frequency?	X						
		Were percent differences for each analyte within the method-required QC limits?	X						
		Was the ICAL curve verified for each analyte?	X						
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X				
S3	O	Mass spectral tuning:							
		Was the appropriate compound for the method used for tuning?	X						
		Were ion abundance data within the method-required QC limits?	X						
S4	O	Internal standards (IS):							
		Were IS area counts and retention times within the method-required QC limits?	X						
S5	OI	Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section 7.1.5)							
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X						
		Were data associated with manual integrations flagged on the raw data?	X						
S6	O	Dual column confirmation							
		Did dual column confirmation results meet the method-required QC?			X				
S7	O	Tentatively identified compounds (TICs):							
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X				
S8	I	Interference Check Sample (ICS) results:							
		Were percent recoveries within method QC limits?			X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions							
		Were percent differences, recoveries, and the linearity within the QC limits specified in the			X				
S10	OI	Method detection limit (MDL) studies							
		Was a MDL study performed for each reported analyte?	X						
		Is the MDL either adjusted or supported by the analysis of DCSs?	X						
S11	OI	Proficiency test reports:							
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation	X						
S12	OI	Standards documentation							
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X						
S13	OI	Compound/analyte identification procedures							
		Are the procedures for compound/analyte identification documented?	X						
S14	OI	Demonstration of analyst competency (DOC)							
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	X						
		Is documentation of the analyst's competency up-to-date and on file?	X						
S15	OI	Verification/validation documentation for methods (NELAC Chap 5 or ISO/IEC 17025 Section 7.1.5)							
		Are all the methods used to generate the data documented, verified, and validated, where	X						
S16	OI	Laboratory standard operating procedures (SOPs):							
		Are laboratory SOPs current and on file for each method performed?	X						

- 1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s).
- 2 Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
- 3 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
- 4 NA = Not applicable.
- 5 NR = Not Reviewed.
- 6 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Appendix A (cont'd): Laboratory Review Checklist: Exception Reports	
Laboratory Name: TestAmerica-Houston	LRC Date: 07/09/08
Project Name: PALMER PLAZA 208110	Laboratory Job Number: 356283
Reviewer Name: YX	Prep Batch Number(s): 400985 and 401071-VOA
ER # <sup>1</sup>	DESCRIPTION
1	The sample ID for sample MW-3 (356283-3) was not listed on the C-O-C; therefore the laboratory used the information on the sample container.
2	The laboratory selected another client's samples to perform as the MSs/MSDs.
3	The 1,2-dichloroethene (total), cis-1,2-dichloroethene, tetrachloroethene, and trichloroethene SDLs for sample 356283-3 were elevated due to the dilutions necessary for analysis.

R# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked on the LRC)

#356283

CHAIN OF CUSTODY RECORD

Client Information		Project Information		Sample Information		Analysis Information		
PO		PROJECT NAME	Palmer Plaza 208110			A B C D E F G H I J K L M N O P Q R S	8260B - VOC TCL's TKRP Package Required	
WO		LAB NUMBER		BOTTLE ORDER				
COMPANY	Buchanan Environmental Associates	BILL TO	Buchanan Environmental Associates					
SEND REPORT TO	David Buchanan	INVOICE ATTN	David Buchanan					
ADDRESS	20406 Perryoak Dr.	ADDRESS	P.O. BOX 14634					
CITY/STATE/ZIP	Humble, TX 77346	CITY/STATE/ZIP	Humble, TX 77347-4634					
PHONE	281-852-2438	PHONE	281-852-2438					
FAX	281-852-2462	FAX	281-852-2462					
SAMPLE NO.	ANALYSIS DESCRIPTION	PRESERV.	SAMPLE NATURE	SAMPLE DATE	SAMPLE TIME	QUANTITY	ANALYSIS CODE	ANALYSIS METHOD
	MW-1	HCL	Water	6/26/08	5:00	3	X	
	MW-2				5:45		X	
					6:40		X	
Sampler: DAVID BUCHANAN		Shipment Method:		Airbill No.:		Required Turnaround: 14DAYS		
1. Relinquished By: David Buchanan		Date: 6/27/08		2. Relinquished By:		Date:		
Company Name: Buchanan Env. Assoc.		Time: 1234		Company Name:		Time:		
1. Received By: Michael Clark		Date: 6-27-08		2. Received By:		Date:		
Company Name: TA		Time: 1234		Company Name:		Time:		

TestAmerica Laboratories, Inc. 6310 Rothway Drive Houston, TX 77040 713-690-4444 FAX 713-690-5646

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rpjsckl Job Sample Receipt Checklist Report		V2
Job Number.: 356283    Location.: 57216    Check List Number.: 1    Description.: Customer Job ID.....    Job Check List Date.:    Date of the Report.: 06/27/2008 Project Number.: 99001165    Project Description.:    Project Manager..... jlr Customer.....: Buchanan Environmental Associates    Contact.: David Buchanan		
Questions ?	(Y/N)	Comments
Chain of Custody Received?.....	Y	
...If "yes", completed properly?.....	Y	
Custody seal on shipping container?.....	N	
...If "yes", custody seal intact?.....		
Custody seals on sample containers?.....	N	
...If "yes", custody seal intact?.....		
Samples chilled?.....	Y	
Temperature of cooler acceptable? (<=6 Deg C).	Y	5.3
...If "no", is sample an air matrix?(no temp req.)		
Thermometer ID.....	Y	466
Samples received intact (good condition)?.....	Y	
Volatile samples acceptable? (no headspace).....	Y	
Correct containers used?.....	Y	
Adequate sample volume provided?.....	Y	
Samples preserved correctly?.....	Y	
Samples received within holding-time?.....	Y	
Agreement between COC and sample labels?.....	Y	
Radioactivity at or below background levels?.....	Y	
Additional.....		
Comments.....		
Sample Custodian Signature/Date.....	Y	TFC

*R*  
*6/27/08*

Job Number: 356283

## TRRP Laboratory Test Results

Date: 7/9/2008

CUSTOMER: Buchanan Environmental Associates

PROJECT: PALMER PLANT, 200810

ATTN: David Buchanan

Customer Sample ID: MW-1

Laboratory Sample ID: 356283-001

Date/Time Sampled .....: 6/26/2008 05:00

Sample Matrix .....: Water

Date/Time Received .....: 6/27/2008 12:34

TEST METHOD	CAS #	RESULT	FLAG	MDL	MOI	SEL	UNITS	Analysis Date/Time	Batch	ID #	Analysis
Method: SW-846 8260B, Water											
1,1,1-Trichloroethane	71-55-6	0.0001	U	0.0001	0.001	0.0001	mg/L	6/28/2008 01:19	400985	1.00	klv
1,1,2,2-Tetrachloroethane	79-34-5	0.00005	U	0.00005	0.001	0.00005	mg/L	6/28/2008 01:19	400985	1.00	klv
1,1,2-Trichloroethane	79-00-5	0.00019	U	0.00019	0.001	0.00019	mg/L	6/28/2008 01:19	400985	1.00	klv
1,1-Dichloroethane	75-34-3	0.00012	U	0.00012	0.001	0.00012	mg/L	6/28/2008 01:19	400985	1.00	klv
1,1-Dichloroethene	75-35-4	0.00012	U	0.00012	0.001	0.00012	mg/L	6/28/2008 01:19	400985	1.00	klv
1,2-Dichloroethane	107-06-2	0.0002	U	0.0002	0.001	0.0002	mg/L	6/28/2008 01:19	400985	1.00	klv
1,2-Dichloroethene (total)	540-59-0	0.00015	U	0.00015	0.002	0.00015	mg/L	6/28/2008 01:19	400985	1.00	klv
1,2-Dichloropropane	78-87-5	0.00012	U	0.00012	0.001	0.00012	mg/L	6/28/2008 01:19	400985	1.00	klv
2-Hexanone	591-78-6	0.00036	U	0.00036	0.001	0.00036	mg/L	6/28/2008 01:19	400985	1.00	klv
4-Methyl-2-pentanone (MIBK)	108-10-1	0.00024	U	0.00024	0.001	0.00024	mg/L	6/28/2008 01:19	400985	1.00	klv
Acetone	67-64-1	0.00052	U	0.00052	0.001	0.00052	mg/L	6/28/2008 01:19	400985	1.00	klv
Benzene	71-43-2	0.00018	U	0.00018	0.001	0.00018	mg/L	6/28/2008 01:19	400985	1.00	klv
Bromodichloromethane	75-27-4	0.00024	U	0.00024	0.001	0.00024	mg/L	6/28/2008 01:19	400985	1.00	klv
Bromoform	75-25-2	0.00031	U	0.00031	0.001	0.00031	mg/L	6/28/2008 01:19	400985	1.00	klv

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# TRRP Laboratory Test Results

Job Number: 356283

Date: 7/9/2008

CUSTOMER: Buchanan Environmental Associates

PROJECT: PALMER PLAZA 200800

ANALYST: David Buchanan

Customer Sample ID: MW-1

Laboratory Sample ID: 356283-001

Date/Time Sampled .....: 6/26/2008 05:00

Sample Matrix .....: Water

Date/Time Received .....: 6/27/2008 12:34

TEST METHOD	CAS #	RESULT	Q	LOD	MDL	MDL	SD	UNITS	Analysis Date/Time	Batch	D.F.	Analysis
Bromomethane	74-83-9	0.00031	U		0.00031	0.001	0.00031	mg/L	6/28/2008 01:19	400985	1.00	klv
Carbon Disulfide	75-15-0	0.00011	U		0.00011	0.001	0.00011	mg/L	6/28/2008 01:19	400985	1.00	klv
Carbon Tetrachloride	56-23-5	0.00018	U		0.00018	0.001	0.00018	mg/L	6/28/2008 01:19	400985	1.00	klv
Chlorobenzene	108-90-7	0.00011	U		0.00011	0.001	0.00011	mg/L	6/28/2008 01:19	400985	1.00	klv
Chloroethane	75-00-3	0.0003	U		0.0003	0.001	0.0003	mg/L	6/28/2008 01:19	400985	1.00	klv
Chloroform	67-66-3	0.00026	U		0.00026	0.001	0.00026	mg/L	6/28/2008 01:19	400985	1.00	klv
Chloromethane	74-87-3	0.0008	J		0.00006	0.001	0.00006	mg/L	6/28/2008 01:19	400985	1.00	klv
cis-1,2-Dichloroethene	156-59-2	0.00015	U		0.00015	0.001	0.00015	mg/L	6/28/2008 01:19	400985	1.00	klv
cis-1,3-Dichloropropene	10061-01-5	0.00013	U		0.00013	0.001	0.00013	mg/L	6/28/2008 01:19	400985	1.00	klv
Dibromochloromethane	124-48-1	0.00018	U		0.00018	0.001	0.00018	mg/L	6/28/2008 01:19	400985	1.00	klv
Ethylbenzene	100-41-4	0.00014	U		0.00014	0.001	0.00014	mg/L	6/28/2008 01:19	400985	1.00	klv
Methyl Ethyl Ketone (2-Butanone)	78-93-3	0.00046	U		0.00046	0.001	0.00046	mg/L	6/28/2008 01:19	400985	1.00	klv
Methylene Chloride	75-09-2	0.00019	U		0.00019	0.001	0.00019	mg/L	6/28/2008 01:19	400985	1.00	klv
Styrene	100-42-5	0.0001	U		0.0001	0.001	0.0001	mg/L	6/28/2008 01:19	400985	1.00	klv
Tetrachloroethene	127-18-4	0.00018	U		0.00018	0.001	0.00018	mg/L	6/28/2008 01:19	400985	1.00	klv

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# TRRP Laboratory Test Results

Job Number: 356283

Date: 7/9/2008

CLIENT/OWNER: Buckman Environmental Associates

PROJECT: PALMER PLAZA 200110

ATTN: Dave England

Customer Sample ID: MW-1

Laboratory Sample ID: 356283-001

Date/Time Sampled .....: 6/26/2008 05:00

Sample Matrix .....: Water

Date/Time Received .....: 6/27/2008 12:34

TEST METHOD	CAN #	RESULT	Q FLAG	MDL	MDL	SDI	UNITS	Analysis Date/Time	Lot #	D.F.	Analyst
Toluene	108-88-3	0.00012	U	0.00012	0.001	0.00012	mg/L	6/28/2008 01:19	400985	1.00	klv
trans-1,2-Dichloroethene	156-60-5	0.00012	U	0.00012	0.001	0.00012	mg/L	6/28/2008 01:19	400985	1.00	klv
trans-1,3-Dichloropropene	10061-02-6	0.00021	U	0.00021	0.001	0.00021	mg/L	6/28/2008 01:19	400985	1.00	klv
Trichloroethene	79-01-6	0.00014	U	0.00014	0.001	0.00014	mg/L	6/28/2008 01:19	400985	1.00	klv
Vinyl Chloride	75-01-4	0.00014	U	0.00014	0.001	0.00014	mg/L	6/28/2008 01:19	400985	1.00	klv
Xylenes (total)	1330-20-7	0.00026	U	0.00026	0.003	0.00026	mg/L	6/28/2008 01:19	400985	1.00	klv

# TRRP Laboratory Test Results

Job Number: 356283

Date: 7/9/2008

ANALYST: Buchanan Environmental Associates

PROJECT: PALMER PLAZA 200110

CLIENT: David Buchanan

Customer Sample ID: MW-2

Laboratory Sample ID: 356283-002

Date/Time Sampled .....: 6/26/2008 05:45

Sample Matrix .....: Water

Date/Time Received .....: 6/27/2008 12:34

TEST METHOD	CAS#	RESULT	Q FLAG	MCL	MDL	SDL	UNIT	Analysis Date/Time	Batch	DP	Analysis
Method: SW-846 8160B Water											
1,1,1-Trichloroethane	71-55-6	0.0001	U	0.0001	0.001	0.0001	mg/L	6/28/2008 01:49	400985	1.00	klv
1,1,2,2-Tetrachloroethane	79-34-5	0.00005	U	0.00005	0.001	0.00005	mg/L	6/28/2008 01:49	400985	1.00	klv
1,1,2-Trichloroethane	79-00-5	0.00019	U	0.00019	0.001	0.00019	mg/L	6/28/2008 01:49	400985	1.00	klv
1,1-Dichloroethane	75-34-3	0.00012	U	0.00012	0.001	0.00012	mg/L	6/28/2008 01:49	400985	1.00	klv
1,1-Dichloroethene	75-35-4	0.00012	U	0.00012	0.001	0.00012	mg/L	6/28/2008 01:49	400985	1.00	klv
1,2-Dichloroethane	107-06-2	0.0002	U	0.0002	0.001	0.0002	mg/L	6/28/2008 01:49	400985	1.00	klv
1,2-Dichloroethene (total)	540-59-0	0.00015	U	0.00015	0.002	0.00015	mg/L	6/28/2008 01:49	400985	1.00	klv
1,2-Dichloropropane	78-87-5	0.00012	U	0.00012	0.001	0.00012	mg/L	6/28/2008 01:49	400985	1.00	klv
2-Hexanone	591-78-6	0.00036	U	0.00036	0.001	0.00036	mg/L	6/28/2008 01:49	400985	1.00	klv
4-Methyl-2-pentanone (MIBK)	108-10-1	0.00024	U	0.00024	0.001	0.00024	mg/L	6/28/2008 01:49	400985	1.00	klv
Acetone	67-64-1	0.00052	U	0.00052	0.001	0.00052	mg/L	6/28/2008 01:49	400985	1.00	klv
Benzene	71-43-2	0.00018	U	0.00018	0.001	0.00018	mg/L	6/28/2008 01:49	400985	1.00	klv
Bromodichloromethane	75-27-4	0.00024	U	0.00024	0.001	0.00024	mg/L	6/28/2008 01:49	400985	1.00	klv
Bromoform	75-25-2	0.00031	U	0.00031	0.001	0.00031	mg/L	6/28/2008 01:49	400985	1.00	klv

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# TRRP Laboratory Test Results

Job Number: 356283

Date: 7/9/2008

CUSTOMER: Buchanan Environmental Associates

PROJECT: PALMER PLAZA 200110

ATTN: David Buchanan

Customer Sample ID: MW-2

Laboratory Sample ID: 356283-002

Date/Time Sampled .....: 6/26/2008 05:45

Sample Matrix .....: Water

Date/Time Received .....: 6/27/2008 12:34

TEST METHOD	CAS#	RESULT	Q FLAG	MDL	LOD	SD	UNITS	Analysis Date/Time	Batch	D.F.	Analyst
Bromomethane	74-83-9	0.00031	U	0.00031	0.001	0.00031	mg/L	6/28/2008 01:49	400985	1.00	klv
Carbon Disulfide	75-15-0	0.00011	U	0.00011	0.001	0.00011	mg/L	6/28/2008 01:49	400985	1.00	klv
Carbon Tetrachloride	56-23-5	0.00018	U	0.00018	0.001	0.00018	mg/L	6/28/2008 01:49	400985	1.00	klv
Chlorobenzene	108-90-7	0.00011	U	0.00011	0.001	0.00011	mg/L	6/28/2008 01:49	400985	1.00	klv
Chloroethane	75-00-3	0.0003	U	0.0003	0.001	0.0003	mg/L	6/28/2008 01:49	400985	1.00	klv
Chloroform	67-66-3	0.00026	U	0.00026	0.001	0.00026	mg/L	6/28/2008 01:49	400985	1.00	klv
Chloromethane	74-87-3	0.00006	U	0.00006	0.001	0.00006	mg/L	6/28/2008 01:49	400985	1.00	klv
cis-1,2-Dichloroethene	156-59-2	0.00015	U	0.00015	0.001	0.00015	mg/L	6/28/2008 01:49	400985	1.00	klv
cis-1,3-Dichloropropene	10061-01-5	0.00013	U	0.00013	0.001	0.00013	mg/L	6/28/2008 01:49	400985	1.00	klv
Dibromochloromethane	124-48-1	0.00018	U	0.00018	0.001	0.00018	mg/L	6/28/2008 01:49	400985	1.00	klv
Ethylbenzene	100-41-4	0.00014	U	0.00014	0.001	0.00014	mg/L	6/28/2008 01:49	400985	1.00	klv
Methyl Ethyl Ketone (2-Butanone)	78-93-3	0.00046	U	0.00046	0.001	0.00046	mg/L	6/28/2008 01:49	400985	1.00	klv
Methylene Chloride	75-09-2	0.00019	U	0.00019	0.001	0.00019	mg/L	6/28/2008 01:49	400985	1.00	klv
Styrene	100-42-5	0.0001	U	0.0001	0.001	0.0001	mg/L	6/28/2008 01:49	400985	1.00	klv
Tetrachloroethene	127-18-4	0.0329		0.00018	0.001	0.00018	mg/L	6/28/2008 01:49	400985	1.00	klv

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# TRRP Laboratory Test Results

Job Number: 356283

Date: 7/9/2008

CUSTOMER: Buchanan Environmental Associates

PROJECT: PALMER PLAZA 200108

ATTN: David Chapman

Customer Sample ID: MW-2

Laboratory Sample ID: 356283-002

Date/Time Sampled .....: 6/26/2008 05:45

Sample Matrix .....: Water

Date/Time Received .....: 6/27/2008 12:34

TEST METHOD	CAS	RESULT	U	PLAC	MDL	MDL	STL	UNITS	Analysis Date/Time	Batch	D.P.	Analysis
Toluene	108-88-3	0.00012	U		0.00012	0.001	0.00012	mg/L	6/28/2008 01:49	400985	1.00	klv
trans-1,2-Dichloroethene	156-60-5	0.00012	U		0.00012	0.001	0.00012	mg/L	6/28/2008 01:49	400985	1.00	klv
trans-1,3-Dichloropropene	10061-02-6	0.00021	U		0.00021	0.001	0.00021	mg/L	6/28/2008 01:49	400985	1.00	klv
Trichloroethene	79-01-6	0.00387			0.00014	0.001	0.00014	mg/L	6/28/2008 01:49	400985	1.00	klv
Vinyl Chloride	75-01-4	0.00014	U		0.00014	0.001	0.00014	mg/L	6/28/2008 01:49	400985	1.00	klv
Xylenes (total)	1330-20-7	0.00026	U		0.00026	0.003	0.00026	mg/L	6/28/2008 01:49	400985	1.00	klv

# TRRP Laboratory Test Results

Job Number: 356283

Date: 7/9/2008

CLIENT: Buchanan Environmental Associates

PROJECT: PALMER PLAZA 200110

ATTN: David Buchanan

Customer Sample ID: MW-3

Laboratory Sample ID: 356283-003

Date/Time Sampled .....: 6/26/2008 06:40

Sample Matrix .....: Water

Date/Time Received .....: 6/27/2008 12:34

TEST METHOD	CAS #	RESULT	U FLAG	MDL	MOI	MDL	UNITY	Analysis Date/Time	Batch	D.F.	Analyst
Method: SW-310 8260B, Water											
1,1,1-Trichloroethane	71-55-6	0.0001	U	0.0001	0.001	0.0001	mg/L	6/28/2008 02:19	400985	1.00	klv
1,1,2,2-Tetrachloroethane	79-34-5	0.00005	U	0.00005	0.001	0.00005	mg/L	6/28/2008 02:19	400985	1.00	klv
1,1,2-Trichloroethane	79-00-5	0.00019	U	0.00019	0.001	0.00019	mg/L	6/28/2008 02:19	400985	1.00	klv
1,1-Dichloroethane	75-34-3	0.00012	U	0.00012	0.001	0.00012	mg/L	6/28/2008 02:19	400985	1.00	klv
1,1-Dichloroethene	75-35-4	0.0016		0.00012	0.001	0.00012	mg/L	6/28/2008 02:19	400985	1.00	klv
1,2-Dichloroethane	107-06-2	0.0002	U	0.0002	0.001	0.0002	mg/L	6/28/2008 02:19	400985	1.00	klv
1,2-Dichloroethene (total)	540-59-0	0.0537		0.00015	0.002	0.0015	mg/L	6/30/2008 16:32	401071	10.0	klv
1,2-Dichloropropane	78-87-5	0.00012	U	0.00012	0.001	0.00012	mg/L	6/28/2008 02:19	400985	1.00	klv
2-Hexanone	591-78-6	0.00036	U	0.00036	0.001	0.00036	mg/L	6/28/2008 02:19	400985	1.00	klv
4-Methyl-2-pentanone (MIBK)	108-10-1	0.00024	U	0.00024	0.001	0.00024	mg/L	6/28/2008 02:19	400985	1.00	klv
Acetone	67-64-1	0.00052	U	0.00052	0.001	0.00052	mg/L	6/28/2008 02:19	400985	1.00	klv
Benzene	71-43-2	0.00018	U	0.00018	0.001	0.00018	mg/L	6/28/2008 02:19	400985	1.00	klv
Bromodichloromethane	75-27-4	0.00024	U	0.00024	0.001	0.00024	mg/L	6/28/2008 02:19	400985	1.00	klv
Bromoform	75-25-2	0.00031	U	0.00031	0.001	0.00031	mg/L	6/28/2008 02:19	400985	1.00	klv

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# TRRP Laboratory Test Results

Job Number: 356283

Date: 7/9/2008

CUSTOMER: Superior Environmental Associates

PROJECT: PALMER PLAZA 200310

ATTN: David Buchanan

Customer Sample ID: MW-3

Laboratory Sample ID: 356283-003

Date/Time Sampled .....: 6/26/2008 06:40

Sample Matrix .....: Water

Date/Time Received .....: 6/27/2008 12:34

TEST METHOD	CAS#	RESULT	FLAG	MDL	ACQ	SPD	UNIT	Analysis Date/Time	Batch	DL	Analysis
Bromomethane	74-83-9	0.00031	U	0.00031	0.001	0.00031	mg/L	6/28/2008 02:19	400985	1.00	klv
Carbon Disulfide	75-15-0	0.00011	U	0.00011	0.001	0.00011	mg/L	6/28/2008 02:19	400985	1.00	klv
Carbon Tetrachloride	56-23-5	0.00018	U	0.00018	0.001	0.00018	mg/L	6/28/2008 02:19	400985	1.00	klv
Chlorobenzene	108-90-7	0.00011	U	0.00011	0.001	0.00011	mg/L	6/28/2008 02:19	400985	1.00	klv
Chloroethane	75-00-3	0.0003	U	0.0003	0.001	0.0003	mg/L	6/28/2008 02:19	400985	1.00	klv
Chloroform	67-66-3	0.00026	U	0.00026	0.001	0.00026	mg/L	6/28/2008 02:19	400985	1.00	klv
Chloromethane	74-87-3	0.00075	J	0.00006	0.001	0.00006	mg/L	6/28/2008 02:19	400985	1.00	klv
cis-1,2-Dichloroethene	156-59-2	0.0537		0.00015	0.001	0.0015	mg/L	6/30/2008 16:32	401071	10.0	klv
cis-1,3-Dichloropropene	10061-01-5	0.00013	U	0.00013	0.001	0.00013	mg/L	6/28/2008 02:19	400985	1.00	klv
Dibromochloromethane	124-48-1	0.00018	U	0.00018	0.001	0.00018	mg/L	6/28/2008 02:19	400985	1.00	klv
Ethylbenzene	100-41-4	0.00043	J	0.00014	0.001	0.00014	mg/L	6/28/2008 02:19	400985	1.00	klv
Methyl Ethyl Ketone (2-Butanone)	78-93-3	0.00046	U	0.00046	0.001	0.00046	mg/L	6/28/2008 02:19	400985	1.00	klv
Methylene Chloride	75-09-2	0.00019	U	0.00019	0.001	0.00019	mg/L	6/28/2008 02:19	400985	1.00	klv
Styrene	100-42-5	0.0001	U	0.0001	0.001	0.0001	mg/L	6/28/2008 02:19	400985	1.00	klv
Tetrachloroethene	127-18-4	23.5		0.00018	0.001	0.09	mg/L	6/30/2008 17:03	401071	500	klv

Form I

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EPAHQ106000631

# TRRP Laboratory Test Results

Job Number: 356283

Date: 7/9/2008

CUSTOMER: Buchanan Environmental Associates

PROJECT: PALMER PLAZA 200110

ATTN: David Buchanan

Customer Sample ID: MW-3

Laboratory Sample ID: 356283-003

Date/Time Sampled .....: 6/26/2008 06:40

Sample Matrix .....: Water

Date/Time Received .....: 6/27/2008 12:34

TEST METHOD	LAST	RESULT	Q FLAG	MDL	MDL	SD	UNITS	Analysis Date/Time	Batch	D.P.	Analyst
Toluene	108-88-3	0.00079	J	0.00012	0.001	0.00012	mg/L	6/28/2008 02:19	400985	1.00	klv
trans-1,2-Dichloroethene	156-60-5	0.00012	U	0.00012	0.001	0.00012	mg/L	6/28/2008 02:19	400985	1.00	klv
trans-1,3-Dichloropropene	10061-02-6	0.00021	U	0.00021	0.001	0.00021	mg/L	6/28/2008 02:19	400985	1.00	klv
Trichloroethene	79-01-6	0.0938		0.00014	0.001	0.0014	mg/L	6/30/2008 16:32	401071	10.0	klv
Vinyl Chloride	75-01-4	0.0007	J	0.00014	0.001	0.00014	mg/L	6/28/2008 02:19	400985	1.00	klv
Xylenes (total)	1330-20-7	0.00056	J	0.00026	0.003	0.00026	mg/L	6/28/2008 02:19	400985	1.00	klv

Form I

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EPAHQ106000632

QUALITY CONTROL RESULTS						
Job Number.: 356283			Report Date.: 07/09/2008			
CUSTOMER: Buchanan Environmental Associates			PROJECT: PALMER PLAZA 208110		ANALYST: David Buchanan	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time

Test Method.....: SW-846 8260B	Units.....: ug/L	Analyst....: klv
Method Description.: Volatile Organics (25mL purge)	Batch(s)....: 400985 401071	

QC	Laboratory Control Sample	V5062500H			06/27/2008	1516
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Benzene, Water	11.1278		10.000000	ND	111.3	18-150	
Bromodichloromethane, Water	12.0426		10.000000	ND	120.4	58-136	
Bromoform, Water	11.7317		10.000000	ND	117.3	64-156	
Bromomethane, Water	9.27414		10.000000	ND	92.7	48-161	
Carbon Tetrachloride, Water	12.1772		10.000000	ND	121.8	62-154	
Chlorobenzene, Water	11.8000		10.000000	ND	118.0	58-152	
Chloroethane, Water	11.1371		10.000000	ND	111.4	43-170	
Chloroform, Water	12.1256		10.000000	ND	121.3	58-154	
Chloromethane, Water	9.54785		10.000000	ND	95.5	31-161	
Dibromochloromethane, Water	11.7418		10.000000	ND	117.4	65-149	
1,1-Dichloroethane, Water	10.8775		10.000000	ND	108.8	64-132	
1,2-Dichloroethane, Water	12.2352		10.000000	ND	122.4	69-131	
1,1-Dichloroethene, Water	11.5189		10.000000	ND	115.2	53-128	
cis-1,2-Dichloroethene, Water	10.6032		10.000000	ND	106.0	60-145	
trans-1,2-Dichloroethene, Water	10.7914		10.000000	ND	107.9	60-147	
1,2-Dichloropropane, Water	10.4092		10.000000	ND	104.1	62-128	
Ethylbenzene, Water	11.3971		10.000000	ND	114.0	70-122	
Methylene Chloride, Water	10.5651		10.000000	ND	105.7	53-138	
Styrene, Water	11.5703		10.000000	ND	115.7	68-126	
1,1,2,2-Tetrachloroethane, Water	11.8337		10.000000	ND	118.3	51-151	
Tetrachloroethene, Water	11.4893		10.000000	ND	114.9	52-145	
Toluene, Water	11.3235		10.000000	ND	113.2	56-149	
1,1,1-Trichloroethane, Water	11.9350		10.000000	ND	119.3	61-141	
1,1,2-Trichloroethane, Water	11.1556		10.000000	ND	111.6	66-129	
Trichloroethene, Water	11.4178		10.000000	ND	114.2	58-153	
Vinyl Chloride, Water	11.0747		10.000000	ND	110.7	44-142	
Xylenes (total), Water	35.1206		30.000000	ND	117.1	41-152	
Acetone, Water	9.07982		10.000000	ND	90.8	38-188	
Carbon Disulfide, Water	12.5011		10.000000	ND	125.0	56-163	
cis-1,3-Dichloropropene, Water	11.6614		10.000000	ND	116.6	49-135	
trans-1,3-Dichloropropene, Water	12.1020		10.000000	ND	121.0	54-155	
Methyl Ethyl Ketone (2-Butanone), Water	12.1510		10.000000	ND	121.5	45-188	
2-Hexanone, Water	11.7808		10.000000	ND	117.8	50-158	
4-Methyl-2-pentanone (MIBK), Water	12.1144		10.000000	ND	121.1	54-151	
1,2-Dichloroethene (total), Water	21.3946		20.000000	ND	107.0	60-140	

MB	Method Blank	V5062500C			06/27/2008	1617
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Benzene, Water	ND						
Bromodichloromethane, Water	ND						
Bromoform, Water	ND						
Bromomethane, Water	ND						
Carbon Tetrachloride, Water	ND						
Chlorobenzene, Water	ND						
Chloroethane, Water	ND						
Chloroform, Water	ND						
Chloromethane, Water	ND						

Job Number.: 356283		QUALITY CONTROL RESULTS		Report Date.: 07/09/2008	
CUSTOMER: Buchanan Environmental Associates		PROJECT: PALMER PLAZA 205110		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date Time
MS	Method Blank	V4542508C			06/27/2008 10:17

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Dibromochloromethane, Water	ND						
1,1-Dichloroethane, Water	ND						
1,2-Dichloroethane, Water	ND						
1,1-Dichloroethene, Water	ND						
cis-1,2-Dichloroethene, Water	ND						
trans-1,2-Dichloroethene, Water	ND						
1,2-Dichloropropane, Water	ND						
Ethylbenzene, Water	ND						
Methylene Chloride, Water	ND						
Styrene, Water	ND						
1,1,2,2-Tetrachloroethane, Water	ND						
Tetrachloroethene, Water	ND						
Toluene, Water	ND						
1,1,1-Trichloroethane, Water	ND						
1,1,2-Trichloroethane, Water	ND						
Trichloroethene, Water	ND						
Vinyl Chloride, Water	ND						
Xylenes (total), Water	ND						
Acetone, Water	ND						
Carbon Disulfide, Water	ND						
cis-1,3-Dichloropropene, Water	ND						
trans-1,3-Dichloropropene, Water	ND						
Methyl Ethyl Ketone (2-Butanone), Water	ND						
2-Hexanone, Water	ND						
4-Methyl-2-pentanone (MIBK), Water	ND						
1,2-Dichloroethane (total), Water	ND						

MS	Matrix Spike	V4542508C	355152-1	10.00000	06/27/2008	10:17	
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Benzene, Water	9.59443		10.000000	ND	96	65-125	
Bromodichloromethane, Water	10.0339		10.000000	ND	100	60-140	
Bromoform, Water	7.02213		10.000000	ND	70	60-140	
Bromomethane, Water	3.62323		10.000000	ND	36	60-140	A
Carbon Tetrachloride, Water	10.6051		10.000000	ND	106	60-140	
Chlorobenzene, Water	10.1312		10.000000	ND	101	72-122	
Chloroethane, Water	8.81187		10.000000	ND	88	60-140	
Chloroform, Water	10.1132		10.000000	ND	101	60-140	
Chloromethane, Water	5.54850		10.000000	ND	55	60-140	A
Dibromochloromethane, Water	9.49980		10.000000	ND	95	60-140	
1,1-Dichloroethane, Water	9.36120		10.000000	ND	94	60-140	
1,2-Dichloroethane, Water	10.4393		10.000000	ND	104	60-140	
1,1-Dichloroethene, Water	10.0055		10.000000	ND	100	22-123	
cis-1,2-Dichloroethene, Water	46.5525		10.000000	36.8196	97	60-140	
trans-1,2-Dichloroethene, Water	9.85000		10.000000	0.57962	93	60-140	
1,2-Dichloropropane, Water	9.13820		10.000000	ND	91	60-140	
Ethylbenzene, Water	9.75864		10.000000	ND	98	60-140	
Methylene Chloride, Water	9.12585		10.000000	1.24931	79	60-140	
Styrene, Water	8.98793		10.000000	ND	90	60-140	
1,1,2,2-Tetrachloroethane, Water	5.50650		10.000000	ND	55	60-140	A
Tetrachloroethene, Water	10.1123		10.000000	0.67646	94	60-140	
Toluene, Water	9.82156		10.000000	ND	98	76-125	

QUALITY CONTROL RESULTS					
Job Number.: 356283			Report Date.: 07/09/2008		
CUSTOMER: Buchanan Environmental Associates		PROJECT: PALMER PLAZA 200110		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date Time

MS	Matrix Spike	MS062508E	355732-7	10.00000	06/27/2008 18:17
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
1,1,1-Trichloroethane, Water	10.1425		10.000000	ND	101	60-140	
1,1,2-Trichloroethane, Water	9.41929		10.000000	ND	94	60-140	
Trichloroethene, Water	10.6409		10.000000	1.11617	95	56-118	
Vinyl Chloride, Water	12.5177		10.000000	4.02456	85	60-140	
Xylenes (total), Water	29.8707		30.000000	ND	100	60-140	
Acetone, Water	1.84950		10.000000	ND	18	60-140	A
Carbon Disulfide, Water	12.3844		10.000000	ND	124	60-140	
cis-1,3-Dichloropropene, Water	8.75816		10.000000	ND	88	60-140	
trans-1,3-Dichloropropene, Water	9.63358		10.000000	ND	96	60-140	
Methyl Ethyl Ketone (2-Butanone), Water	11.1509		10.000000	ND	112	60-140	
2-Hexanone, Water	11.0463		10.000000	ND	110	60-140	
4-Methyl-2-pentanone (MIBK), Water	10.6018		10.000000	ND	106	60-140	

MSD	Matrix Spike Duplicate	MS062508E	355732-7	10.00000	06/27/2008 19:17
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Benzene, Water	10.7517	9.59443	10.000000	ND	108	65-125	
					11.4	30.0	
Bromodichloromethane, Water	11.0276	10.0339	10.000000	ND	110	60-140	
					9.4	30.0	
Bromoform, Water	7.65758	7.02213	10.000000	ND	77	60-140	
					8.7	30.0	
Bromomethane, Water	5.16919	3.62323	10.000000	ND	52	60-140	A
					35.2	30.0	r
Carbon Tetrachloride, Water	12.2230	10.6051	10.000000	ND	122	60-140	
					14.2	30.0	
Chlorobenzene, Water	11.3032	10.1312	10.000000	ND	113	72-122	
					10.9	30.0	
Chloroethane, Water	9.87950	8.81187	10.000000	ND	99	60-140	
					11.4	30.0	
Chloroform, Water	11.1927	10.1132	10.000000	ND	114	60-140	
					11.9	30.0	
Chloromethane, Water	6.24380	5.54850	10.000000	ND	62	60-140	
					11.8	30.0	
Dibromochloromethane, Water	10.6375	9.49980	10.000000	ND	106	60-140	
					11.3	30.0	
1,1-Dichloroethane, Water	10.4751	9.36120	10.000000	ND	105	60-140	
					11.2	30.0	
1,2-Dichloroethane, Water	10.9123	10.6393	10.000000	ND	109	60-140	
					4.4	30.0	
1,1-Dichloroethene, Water	11.3320	10.0055	10.000000	ND	113	22-123	
					12.4	30.0	
cis-1,2-Dichloroethene, Water	46.0516	46.5525	10.000000	36.8196	92	60-140	
					1.1	30.0	
trans-1,2-Dichloroethene, Water	11.0377	9.85000	10.000000	0.57962	105	60-140	
					11.4	30.0	
1,2-Dichloropropane, Water	9.90017	9.13820	10.000000	ND	99	60-140	
					8.0	30.0	
Ethylbenzene, Water	11.3176	9.75864	10.000000	ND	113	60-140	
					14.8	30.0	
Methylene Chloride, Water	9.46086	9.12585	10.000000	1.24931	82	60-140	
					3.6	30.0	

Job Number.: 356283		QUALITY CONTROL RESULTS			Report Date.: 07/09/2008	
CUSTOMER: Buchanan Environmental Associates      PROJECT: PALMER PLAZA 208110      ATTN:						
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time

MSD	MATRIX Spike Dilution	MS06250AE	355732-7	10.00000	06/27/2008 1517
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Styrene, Water	10.7263	8.98793	10.000000	ND	107	60-140	
					17.6	30.0	
1,1,2,2-Tetrachloroethane, Water	6.13428	5.50650	10.000000	ND	61	60-140	
					10.8	30.0	
Tetrachloroethane, Water	12.0019	10.1123	10.000000	0.67646	113	60-140	
					17.1	30.0	
Toluene, Water	11.2401	9.82156	10.000000	ND	112	76-125	
					13.5	30.0	
1,1,1-Trichloroethane, Water	11.4348	10.1425	10.000000	ND	114	60-140	
					12.0	30.0	
1,1,2-Trichloroethane, Water	10.3373	9.41929	10.000000	ND	103	60-140	
					9.3	30.0	
Trichloroethane, Water	12.0128	10.6409	10.000000	1.11617	109	56-118	
					12.1	30.0	
Vinyl Chloride, Water	13.4661	12.5177	10.000000	4.02456	94	60-140	
					7.3	30.0	
Xylenes (total), Water	34.0057	29.8707	30.000000	ND	113	60-140	
					12.9	30.0	
Acetone, Water	1.92361	1.84950	10.000000	ND	19	60-140	A
					3.9	30.0	
Carbon Disulfide, Water	14.0554	12.3844	10.000000	ND	141	60-140	A
					12.6	30.0	
cis-1,3-Dichloropropene, Water	9.62964	8.75816	10.000000	ND	96	60-140	
					9.5	30.0	
trans-1,3-Dichloropropene, Water	10.2053	9.63358	10.000000	ND	102	60-140	
					5.8	30.0	
Methyl Ethyl Ketone (2-Butanone), Water	11.4070	11.1509	10.000000	ND	114	60-140	
					2.3	30.0	
2-Hexanone, Water	11.6332	11.0463	10.000000	ND	116	60-140	
					5.2	30.0	
4-Methyl-2-pentanone (MIBK), Water	11.1019	10.6016	10.000000	ND	111	60-140	
					4.6	30.0	

LCS	Laboratory Control Sample	MS06250AK1				06/30/2008 1331
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Benzene, Water	10.1703		10.000000	ND	101.7	18-150	
Bromodichloromethane, Water	11.0409		10.000000	ND	110.4	58-136	
Bromoform, Water	11.1227		10.000000	ND	111.2	64-156	
Bromomethane, Water	8.30021		10.000000	ND	83.0	48-161	
Carbon Tetrachloride, Water	10.6342		10.000000	ND	106.3	62-154	
Chlorobenzene, Water	10.8007		10.000000	ND	108.0	58-152	
Chloroethane, Water	10.3293		10.000000	ND	103.3	43-170	
Chloroform, Water	10.9590		10.000000	ND	109.6	58-154	
Chloromethane, Water	8.97383		10.000000	ND	89.7	31-161	
Dibromochloromethane, Water	10.6971		10.000000	ND	107.0	65-149	
1,1-Dichloroethane, Water	9.86716		10.000000	ND	98.7	64-132	
1,2-Dichloroethane, Water	11.4997		10.000000	ND	115.0	69-131	
1,1-Dichloroethene, Water	10.4424		10.000000	ND	104.4	53-128	
cis-1,2-Dichloroethane, Water	9.87205		10.000000	ND	98.7	60-145	
trans-1,2-Dichloroethane, Water	10.1422		10.000000	ND	101.4	60-147	
1,2-Dichloropropane, Water	9.77984		10.000000	ND	97.8	62-128	

Job Number.: 356283		QUALITY CONTROL RESULTS			Report Date.: 07/09/2008	
CUSTOMER: Buchanan Environmental Associates		PROJECT: PALMER PLAZA 200110			ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time

MS	Laboratory Control Sample	MS0625061M			06/30/2008 1331
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Ethylbenzene, Water	10.6195		10.000000	ND	106.2	70-122	
Methylene Chloride, Water	8.92933		10.000000	ND	89.3	53-138	
Styrene, Water	10.7033		10.000000	ND	107.0	68-126	
1,1,2,2-Tetrachloroethane, Water	10.8606		10.000000	ND	108.6	51-151	
Tetrachloroethene, Water	10.6365		10.000000	ND	106.4	52-145	
Toluene, Water	10.4997		10.000000	ND	105.0	56-149	
1,1,1-Trichloroethane, Water	10.8179		10.000000	ND	108.2	61-141	
1,1,2-Trichloroethane, Water	10.5015		10.000000	ND	105.0	66-129	
Trichloroethene, Water	10.2460		10.000000	ND	102.5	58-153	
Vinyl Chloride, Water	10.0582		10.000000	ND	100.6	44-142	
Xylenes (total), Water	32.0992		30.000000	ND	107.0	41-152	
Acetone, Water	13.6110		10.000000	ND	136.1	38-188	
Carbon Disulfide, Water	11.4354		10.000000	ND	116.4	56-163	
cis-1,3-Dichloropropene, Water	10.7761		10.000000	ND	107.8	49-135	
trans-1,3-Dichloropropene, Water	11.3262		10.000000	ND	113.3	54-155	
Methyl Ethyl Ketone (2-Butanone), Water	11.5250		10.000000	ND	115.2	45-188	
2-Hexanone, Water	11.7029		10.000000	ND	117.0	50-158	
4-Methyl-2-pentanone (MIBK), Water	11.4256		10.000000	ND	114.3	54-151	
1,2-Dichloroethene (total), Water	20.0143		20.000000	ND	100.1	60-140	

MB	Method Blank	MS062505C			06/30/2008 1432
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Benzene, Water	ND						
Bromodichloromethane, Water	ND						
Bromoform, Water	ND						
Bromomethane, Water	ND						
Carbon Tetrachloride, Water	ND						
Chlorobenzene, Water	ND						
Chloroethane, Water	ND						
Chloroform, Water	ND						
Chloromethane, Water	ND						
Dibromochloromethane, Water	ND						
1,1-Dichloroethane, Water	ND						
1,2-Dichloroethene, Water	ND						
1,1-Dichloroethene, Water	ND						
cis-1,2-Dichloroethene, Water	ND						
trans-1,2-Dichloroethene, Water	ND						
1,2-Dichloropropane, Water	ND						
Ethylbenzene, Water	ND						
Methylene Chloride, Water	ND						
Styrene, Water	ND						
1,1,2,2-Tetrachloroethane, Water	ND						
Tetrachloroethane, Water	ND						
Toluene, Water	ND						
1,1,1-Trichloroethane, Water	ND						
1,1,2-Trichloroethane, Water	ND						
Trichloroethene, Water	ND						
Vinyl Chloride, Water	ND						
Xylenes (total), Water	ND						
Acetone, Water	ND						
Carbon Disulfide, Water	ND						

QUALITY CONTROL RESULTS					
Job Number.: 356283			Report Date.: 07/09/2008		
CUSTOMER: Buchanan Environmental Associates		PROJECT: PALMER PLAZA 205110		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date Time

MB	Method Blank	V5062508C			06/30/2008 1432
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
cis-1,3-Dichloropropene, Water	ND						
trans-1,3-Dichloropropene, Water	ND						
Methyl Ethyl Ketone (2-Butanone), Water	ND						
2-Hexanone, Water	ND						
4-Methyl-2-pentanone (MIBK), Water	ND						
1,2-Dichloroethene (total), Water	ND						

Ms	Matrix Spike	V5062508B	355732-A	10.00000		06/30/2008 1502
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Benzene, Water	10.5943		10.000000	ND	106	65-125	
Bromodichloromethane, Water	10.8988		10.000000	ND	109	60-140	
Bromoform, Water	7.36428		10.000000	ND	74	60-140	
Bromomethane, Water	4.44016		10.000000	ND	44	60-140	A
Carbon Tetrachloride, Water	11.4636		10.000000	ND	115	60-140	
Chlorobenzene, Water	11.0770		10.000000	ND	111	72-122	
Chloroethane, Water	10.0543		10.000000	ND	101	60-140	
Chloroform, Water	11.0637		10.000000	ND	111	60-140	
Chloromethane, Water	6.15003		10.000000	ND	62	60-140	
Dibromochloromethane, Water	10.4518		10.000000	ND	103	60-140	
1,1-Dichloroethane, Water	10.1727		10.000000	ND	102	60-140	
1,2-Dichloroethane, Water	11.3636		10.000000	ND	114	60-140	
1,1-Dichloroethene, Water	11.1191		10.000000	ND	111	22-123	
cis-1,2-Dichloroethene, Water	47.6261		10.000000	44.8305	28	60-140	A
trans-1,2-Dichloroethene, Water	10.7340		10.000000	0.63995	101	60-140	
1,2-Dichloropropene, Water	10.0421		10.000000	ND	100	60-140	
Ethylbenzene, Water	10.7479		10.000000	ND	107	60-140	
Methylene Chloride, Water	8.99762		10.000000	ND	90	60-140	
Styrene, Water	10.7758		10.000000	ND	108	60-140	
1,1,2,2-Tetrachloroethane, Water	6.02707		10.000000	ND	60	60-140	
Tetrachloroethene, Water	11.3592		10.000000	0.89855	105	60-140	
Toluene, Water	10.7303		10.000000	ND	107	76-125	
1,1,1-Trichloroethane, Water	11.0565		10.000000	ND	111	60-140	
1,1,2-Trichloroethane, Water	10.0149		10.000000	ND	100	60-140	
Trichloroethene, Water	11.7442		10.000000	1.35085	104	56-118	
Vinyl Chloride, Water	13.4765		10.000000	4.93968	85	60-140	
Xylenes (total), Water	32.8833		30.000000	ND	110	60-140	
Acetone, Water	2.30894		10.000000	ND	23	60-140	A
Carbon Disulfide, Water	13.8405		10.000000	ND	138	60-140	
cis-1,3-Dichloropropene, Water	10.3998		10.000000	ND	104	60-140	
trans-1,3-Dichloropropene, Water	11.1948		10.000000	ND	112	60-140	
Methyl Ethyl Ketone (2-Butanone), Water	12.1523		10.000000	ND	122	60-140	
2-Hexanone, Water	11.9764		10.000000	ND	120	60-140	
4-Methyl-2-pentanone (MIBK), Water	11.6763		10.000000	ND	117	60-140	

Job Number.: 356283		QUALITY CONTROL RESULTS			Report Date.: 07/09/2008	
CUSTOMER: Buchanan Environmental Associates		PROJECT: PALMER BEAZZ 208110			ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time

MSD	Matrix Spike Duplicate	15042508E	355732-8	10.00000	07/30/2008	1532
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Benzene, Water	11.1232	10.5943	10.000000	ND	111 4.9	65-125 30.0	
Bromodichloromethane, Water	11.5635	10.8988	10.000000	ND	116 5.9	60-140 30.0	
Bromoform, Water	8.04496	7.36428	10.000000	ND	80 8.8	60-140 30.0	
Bromomethane, Water	5.62314	4.44016	10.000000	ND	56 23.5	60-140 30.0	A
Carbon Tetrachloride, Water	12.2724	11.4636	10.000000	ND	123 6.8	60-140 30.0	
Chlorobenzene, Water	11.6651	11.0770	10.000000	ND	117 5.2	72-122 30.0	
Chloroethane, Water	10.5277	10.0543	10.000000	ND	105 4.6	60-140 30.0	
Chloroform, Water	11.7581	11.0657	10.000000	ND	118 6.1	60-140 30.0	
Chloromethane, Water	6.78130	6.15003	10.000000	ND	68 9.8	60-140 30.0	
Dibromochloromethane, Water	10.9176	10.4518	10.000000	ND	109 4.4	60-140 30.0	
1,1-Dichloroethane, Water	10.8197	10.1727	10.000000	ND	108 6.2	60-140 30.0	
1,2-Dichloroethane, Water	12.2344	11.3636	10.000000	ND	122 7.4	60-140 30.0	
1,1-Dichloroethane, Water	12.0587	11.1191	10.000000	ND	121 8.1	22-123 30.0	
cis-1,2-Dichloroethene, Water	48.5397	47.6261	10.000000	44.8305	37 1.9	60-140 30.0	A
trans-1,2-Dichloroethene, Water	11.4098	10.7340	10.000000	0.63995	108 6.1	60-140 30.0	
1,2-Dichloropropane, Water	10.6316	10.0421	10.000000	ND	106 5.7	60-140 30.0	
Ethylbenzene, Water	11.3416	10.7479	10.000000	ND	113 5.4	60-140 30.0	
Methylene Chloride, Water	9.62106	8.99762	10.000000	ND	96 6.7	60-140 30.0	
Styrene, Water	11.3562	10.7758	10.000000	ND	114 5.2	60-140 30.0	
1,1,2,2-Tetrachloroethane, Water	6.43277	6.02707	10.000000	ND	64 6.5	60-140 30.0	
Tetrachloroethene, Water	11.9722	11.3592	10.000000	0.89855	111 5.3	60-140 30.0	
Toluene, Water	11.3278	10.7303	10.000000	ND	113 5.4	76-125 30.0	
1,1,1-Trichloroethane, Water	11.6656	11.0565	10.000000	ND	117 5.4	60-140 30.0	
1,1,2-Trichloroethane, Water	10.6785	10.0149	10.000000	ND	107 6.4	60-140 30.0	
Trichloroethene, Water	12.0335	11.7442	10.000000	1.35085	107 2.4	56-118 30.0	
Vinyl Chloride, Water	14.4939	13.4765	10.000000	6.93968	96 7.3	60-140 30.0	
Xylenes (total), Water	34.6700	32.8833	30.000000	ND	116 5.3	60-140 30.0	

QUALITY CONTROL RESULTS					
Job Number.: 356283			Report Date.: 07/09/2008		
CUSTOMER: Buchanan Environmental Associates		PROJECT: PALMER PLAZA 200140		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date Time
MSD	Matrix Spike Duplicate	VS062508E	355332-B	10.00000	06/30/2008 1532

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Acetone, Water	2.46492	2.30894	10.000000	ND	25 6.5	60-140 30.0	A
Carbon Disulfide, Water	14.8252	13.8405	10.000000	ND	148 6.9	60-140 30.0	A
cis-1,3-Dichloropropene, Water	10.8126	10.3998	10.000000	ND	108 3.9	60-140 30.0	
trans-1,3-Dichloropropene, Water	11.5775	11.1948	10.000000	ND	116 3.4	60-140 30.0	
Methyl Ethyl Ketone (2-Butanone), Water	12.8762	12.1523	10.000000	ND	129 5.8	60-140 30.0	
2-Hexanone, Water	11.7408	11.9764	10.000000	ND	117 2.0	60-140 30.0	
4-Methyl-2-pentanone (MIBK), Water	12.1221	11.6763	10.000000	ND	121 3.7	60-140 30.0	

Job Number.: 356283

## SURROGATE RECOVERIES REPORT

Report Date.: 07/09/2008

CUSTOMER: Buchanan Environmental Associates

PROJECT: PALMER PLAZA 200110

ATTN: David Buchanan

Method.....: Volatile Organics (25mL purge)  
Batch(s).....: 400985 401071Method Code....: 8260M  
Test Matrix....: WaterPrep Batch.....:   
Equipment Code: GCM5VOA06

Lab ID	DT	Sample ID	Date	12DCED	BRFLBE	DBRFLM	TOLDB
355732-	7 MS	MW-4-(061708)	06/27/2008	81.8	88.6	79.2	82.5
355732-	7 MSD	MW-4-(061708)	06/27/2008	93.3	108.9	95.3	101.6
355732-	8 MS	DUP-1	06/30/2008	85.9	96.2	85.9	87.8
355732-	8 MSD	DUP-1	06/30/2008	102.7	109.0	103.6	101.6
356283-	1	MW-1	06/28/2008	97.4	103.2	92.1	95.2
356283-	2	MW-2	06/28/2008	92.7	98.9	91.7	92.3
356283-	3	MW-3	06/28/2008	104.2	108.1	102.8	107.8
356283-	3	MW-3	06/30/2008	108.8	114.5	102.8	98.5
356283-	3	MW-3	06/30/2008	104.2	105.3	100.8	97.6
400985--21	LCS		06/27/2008	116.6	105.1	111.7	111.6
400985--21	MB		06/27/2008	105.3	108.9	100.1	103.9
401071--21	LCS		06/30/2008	110.0	96.1	105.4	102.8
401071--21	MB		06/30/2008	108.8	114.4	102.4	103.8

Test	Test Description	Limits
12DCED	1,2-Dichloroethane-d4	70 - 130
BRFLBE	4-Bromofluorobenzene	70 - 130
DBRFLM	Dibromofluoromethane	70 - 130
TOLDB	Toluene-d8	70 - 130

# QUALITY ASSURANCE METHODS

## REFERENCES AND NOTES

Report Date: 07/09/2008

### REPORT COMMENTS

- 1) All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.
- 2) Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.
- 3) According to 40CFR Part 136.3, pH, Chlorine Residual, and Dissolved Oxygen analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field, (e.g. pH Field) they were not analyzed immediately, but as soon as possible on laboratory receipt.
- 4) For all USACE projects, the QC limits are based on "mean +/- 2 sigma", which are the warning limits.

### General Information:

- Cresylic Acid is the combination of o,m and p-Cresol. The combination is reported as the final result.
- m-Cresol (3-Methylphenol) and p-Cresol (4-methylphenol) co-elute. The result of the two is reported as either m&p-cresol or as 4-methylphenol (p-cresol).
- m-Xylene and p-Xylene co-elute. The result of the two is reported as m,p-Xylene.
- N-Nitrosodiphenylamine decomposes in the gas chromatograph inlet forming diphenylamine and, consequently, may be detected as diphenylamine.
- Methylene Chloride and Acetone are recognized potential laboratory contaminants. Its presence in the sample up to five times the amount reported in the blank may be attributed to laboratory contamination.
- Trimethylsilyl(Diazomethane) is used to esterify acid herbicides in Method SW-846 8151A.
- For Inorganic analyses, duplicate QC limits are determined as follows: If the sample result is less than or equal to 5 times the reporting limit, the RPD limit is equal to the reporting limit. If the sample result is greater than 5 times the reporting limit, the RPD limit is the method defined RPD.
- For TRRP reports, the header on the column RL is equivalent to a MDL/PQL.
- Results for LCS and MS/MSD recoveries listed in the report are reported as ug/L on-column values which are not corrected for variables such as sample volumes or weights extracted, final volume of extracts and dilutions. To correct QC on-column recoveries to reflect actual spiking volumes for soils, multiply the values reported for Diesel Range Organics and Semivolatiles by 33.3 and Gasoline Range Organics by 20. The B260 and 1006 results will not require correction. The only correction required for water analysis is for method 1006 where the reported concentration must be multiplied by 0.1.
- Due to limitation of the reporting software, results for the Method blank in the Semivolatile fraction are reported as "0". Which indicates there was no compound detected at the reporting limit for the compound revealed.
- The dilution factor listed on the report represents only the analytical dilutions necessary for the target compounds to be within the calibration range of the instrument. It does not include any preparation factors, dry weight or any other adjustment.

### Explanation of Qualifiers:

- U - This qualifier indicates that the analyte was analyzed but not detected.
- J - (Organics only) This qualifier indicates that the analyte is an estimated value between the RL and the MDL.
- B - (Inorganics only) This Qualifier indicates that the analyte is an estimated value between the RL and the MDL.
- N - (Organics only) This flag indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as "chlorinated hydrocarbon", the "NM" flag is not used.

### Explanation of General QC Outliers:

- A - Matrix interference present in sample.
- a - MS/MSD analyses yielded comparable poor recoveries, indicating a possible matrix interference. Method performance is demonstrated by acceptable LCS recoveries.
- b - Target analyte was found in the method blank.
- M - QC sample analysis yielded recoveries outside QC acceptance criteria. This sample was reanalyzed.
- L - LCS analysis yielded high recoveries, indicating a potential high bias. No target analytes were

# QUALITY ASSURANCE METHODS

## REFERENCES AND NOTES

Report Date: 07/09/2008

- observed above the RL in the associated samples.
- G - Marginal outlier within 1% of acceptance criteria.
- r - RPD value is outside method acceptance criteria.
- C - Poor RPD values observed due to the non-homogenous nature of the sample.
- O - Sample required dilution due to matrix interference.
- D - Sample reported from a dilution.
- d - Spike and/or surrogate diluted.
- E - The reported concentration exceeds the instrument calibration.
- F - The analyte is outside QC limits and was not detected in any associated samples in the analytical batch.
- H - Continuing Calibration Verification (CCV) standard is not associated with the samples reported.
- q - See the subcontract final report for qualifier explanation.
- W - The MS/MSD recoveries are outside QC acceptance criteria because the amount spiked is much less than the amount found in the sample.
- K - High recovery will not affect the quality of reported results.
- Z - See case narrative.

### Explanation of Organic QC Outliers:

- e - Method blank analysis yielded phthalate concentrations above the RL. Phthalates are recognized potential laboratory contaminants. Its presence in the sample up to five times the amount reported in the blank may be attributed to laboratory contamination.
- S - Sample reanalyzed/reextracted due to poor surrogate recovery. Reanalysis confirmed original analysis indicating a possible matrix interference.
- T - Sample analysis yielded poor surrogate recovery.
- R - The RPD between the two GC columns is greater than 40% and no anomalies are present. The higher result is reported as per EPA Method 8000B.
- I - The RPD between the two GC columns is greater than 40% and anomalies are present. The lower of the two results has been reported.
- X - Gaseous compound, In-house QC limits are advisory.
- Y - Ketone compounds have poor purge efficiency. In-house QC limits are advisory.
- f - Surrogate not associated with reported analytes.

### Explanation of Inorganic QC Outliers:

- Q - Method blank analysis yielded target analytes above the RL. Associated sample results are greater than 10 times the concentrations observed in the method blank.
- V - The RPD control limit for sample results less than 5 times the RL is +/- the RL value. Sample and duplicate results are within method acceptance criteria.
- e - Serial dilution failed due to matrix interference.
- g - Sample result quantitated by Method of Standard Additions (MSA) due to the analytical spike recovery being below 85 percent. The correlation coefficient for the MSA is greater than or equal to 0.995.
- s - BOD/cBOD seed value is not within method acceptance criteria. Due to the nature of the test method, the sample cannot be reanalyzed.
- l - BOD/cBOD LCS value is not within method acceptance criteria. Due to the nature of the test method, sample cannot be reanalyzed.
- N - Spiked sample recovery is not within control limits.
- n - Sample result quantitated by Method of Standard Additions (MSA) due to the analytical spike recovery being below 85 percent. The correlation coefficient for the MSA is less than 0.995.
- \* - Duplicate analysis is not within control limits.

### Abbreviations:

- Batch - Designation given to identify a specific extraction, digestion, preparation, or analysis set.
- CCV - Continuing Calibration Verification
- CRA - Low level standard check - GFAA, Mercury
- CRI - Low level standard check - ICP
- Dil Fac - Dilution Factor - Secondary dilution analysis

# QUALITY ASSURANCE METHODS

## REFERENCES AND NOTES

Report Date: 07/09/2008

DLFac	- Detection Limit Factor
DU	- Duplicate
EB	- Extraction Blank (TCLP, SPLP, etc.)
ICAL	- Initial Calibration
ICB	- Initial Calibration Blank
ICV	- Initial Calibration Verification
ISA	- Interference Check Sample A - ICP
ISB	- Interference Check Sample B - ICP
LCD	- Laboratory Control Duplicate
LCS	- Laboratory Control Sample
MB	- Method Blank
MD	- Method Duplicate
MDL	- Method Detection Limit
NQL	- Method Quantitation Limit (TRRP)
MS	- Matrix Spike
MSD	- Matrix Spike Duplicate
ND	- Not Detected
PB	- Preparation Blank
PREPF	- Preparation Factor
RL	- Reporting Limit
RPD	- Relative Percent Difference
RRF	- Relative Response Factor
RT	- Retention Time
SQL	- Sample Quantitation Limit (TRRP)
TIC	- Tentatively Identified Compound

### Method References:

- (1) EPA 600/4-79-020 Methods for the Analysis of Water and Wastes, March 1983.
- (2) EPA 600/R-94-111 Methods for the Determination of Metals in Environmental Samples, Supplement 1, May 1994.
- (3) EPA SW846 Test Methods for Evaluating Solid Waste, Third Edition, September 1986; Update I July 1992; Update II, September 1994, Update IIA August 1993; Update IIB, January 1995; Update III, December 1996, Update IVA January 1998, Update IVB November 2000.
- (4) Standard Methods for the Examination of Water and Wastewater, 16th Edition (1985), 17th Edition (1989), 18th Edition (1992), 19th Edition (1995), 20th Edition (1998).
- (5) HACH Water Analysis Handbook 3rd Edition (1997).
- (6) Federal Register, July 1, 1990 (40 CFR Part 136 Appendix A).
- (7) Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, 2nd Edition, January 1997.
- (9) Diagnosis and Improvement of Saline and Alkali Soils, Agriculture Handbook No. 60, United States Department of Agriculture, 1954.

Job Number: 356283

## LABORATORY CHRONICLE

Date: 07/09/2008

CUSTOMER: Buchanan Environmental Associates

PROJECT: PALMER PLAZA 208110

ANALYST: David Buchanan

Lab ID: 356283-1	Client ID: MW-1	Date Recvd: 06/27/2008	Sample Date: 06/26/2008		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BY	#(S)
SW-846 82608	Volatile Organics (25mL purge)	1	400985		
			DATE/TIME ANALYZED		DILUTION
			06/28/2008 0119		1.00000
Lab ID: 356283-2	Client ID: MW-2	Date Recvd: 06/27/2008	Sample Date: 06/26/2008		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BY	#(S)
SW-846 82608	Volatile Organics (25mL purge)	1	400985		
			DATE/TIME ANALYZED		DILUTION
			06/28/2008 0149		1.00000
Lab ID: 356283-3	Client ID: MW-3	Date Recvd: 06/27/2008	Sample Date: 06/26/2008		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BY	#(S)
SW-846 82608	Volatile Organics (25mL purge)	1	400985		
SW-846 82608	Volatile Organics (25mL purge)	1	401071		
SW-846 82608	Volatile Organics (25mL purge)	1	401071		
			DATE/TIME ANALYZED		DILUTION
			06/28/2008 0219		1.00000
			06/30/2008 1632		10.0000
			06/30/2008 1703		500.000



4904 Griggs Road  
Houston, TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1676

To: Gary Brauckman  
Cc: Gary Lenertz, Gary Peterson, Bo Cumberland

Date: 04/23/08

From: Miles Root

Lab Memo: 08-069

Subject: **Citation Evaluation Samples 0408-53 thru 56**

Four samples from Citation, Lufkin, have been evaluated as potential receipts for processing at CES. These samples are as follows: containment water, 0408-53; oil, 0408-54; NDT fluid, 0408-55; and a sulfuric acid stream containing DMEA, 0408-56. Overall, we will be able to take all of the mentioned streams, processing them as described below.

The containment water, evaluation 0408-53, according to the evaluation form, may have oil or hydrocarbons, but this sample does not. The water treats easily, has a low TOC, metals and phenols. Since this stream may arrive with hydrocarbons, any type of diesel, oil or gasoline that may come in with this water would need to be recycled.

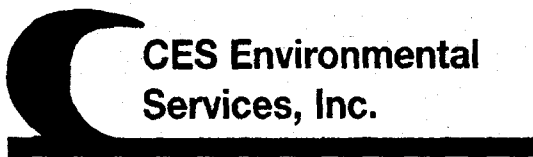
→ The mixture of lube and mineral oils, evaluation 0408-54, is good looking light colored oil. This oil has an ash of only 0.05% with a chlor-d-tect of 200 ppm. A flash point of greater than 140 deg F and a density of 0.846 makes this a potentially good candidate for base oil.

The NDT fluid, evaluation 0408-55, contains approximately 33% recyclable oil. The neat sample appears to be an emulsion but breaks easily with just a little acid and essentially no heat. The oil separates out cleanly. The water phase treats easily. The water after treatment shows high copper that can be diluted with "good" water and processed. All of the other metals are okay. Phenols and TOC are also good. The oil has a density of 0.890 and can be blended into black oil without issues. The chlor-d-tect of only 100 ppm is very low.

The sulfuric acid stream containing DMEA, evaluation 0408-56, does not treat well. The initial pH of 1.3, when adjusted higher with lime forms a heavy sludge. Ammonia is also heavily liberated when this sample is pH adjusted with lime. The TOC on the water is 65,200, a rather high value, and to be expected. The metals are acceptable. There is a potential for receiving only 2-3 totes per month of the stream, so it can most likely be blended down with our other process water, if we can effectively handle the ammonia issue.

The table below is an analytical summary of the testing completed on the Citation evaluation samples.

2935  
Weingarten at Citadel



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 8/19/2008

Dear Zac or Dave

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # 2935

Expiration Date 8/19/2010

Generator: Weingarten at Citadel  
Address: 2600 Citadel Plaza Drive  
Houston, TX 77008

### Waste Information

Name of Waste: Soil

TCEQ Waste Code #: CESQ3191

Container Type:

Detailed Description of Process Generating Waste:

Sampling wells - any kind of contamination in soil is mainly dry cleaners

Color: dark

Odor: none

pH: na

Physical State:

Incompatibilities: none

Safety Related Data/Special Handling:

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000648

Attn: Dan/MARGAD SRP  
37 pages  
Revised we do not recycle soil.



CES Environmental  
Services, Inc.

4904 Griggs Road, Houston, TX 77021

Phone: (713) 676-1460

Fax: (713) 676-1676

<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461

ISWR Number: 30900

Need more info  
on the process  
of generation.

Thanks,  
Rahmah  
an analytical  
will be nice.

**SECTION 1: Generator Information**

Company: WEINGARTEN REALTY INVESTORS

Address: 2600 CITADEL PLAZA DRIVE

City: HOUSTON

State: TX

Zip: 77008

Contact: CHUCK GURNEY

Title:

Phone Number: 713-866-6855

Fax Number: 713-866-6066

24/hr Phone Number: 281-541-4829

US EPA ID No: TXCESQG

State ID No: CESQG

SIC Code:

**SECTION 2: Billing Information - ☐ Same as Above**

Company: CKG SERVICES

Address: 10707 HONEA EGYPT RIAD

City: MONTGOMERY

State: TX

Zip: 77316

Contact: JAMIE BADER

Title: AP

Phone Number: 936-483-3662

Fax Number: 936-756-1226

**SECTION 3: General Description of the Waste**

Name of Waste: SOIL

Detailed Description of Process Generating Waste:

SAMPLING WELLS - ~~regular~~ any kind

of contamination in soil, mainly dry cleaners

Physical State:

☐

Liquid

☐

Sludge

☐

Powder

☒

Solid

☐

Filter Cake

☐

Combination

Color: DARK

Odor:

NONE

Specific Gravity (water=1):

NA

Density: NA

lbs/gal

Does this material contain any total phenolic compounds?

☐

Yes

☒

No

Does this material contain any para substituted phenolic compounds?

☐

Yes

☒

No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF)

☐

Yes

☒

No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers:

☒

Single-phase

☐

Multi-phase

Container Type:

☒

Drum

☐

Tote

☐

Truck

☐

Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☒ Yearly ☒ One-Time

Quantity:

6

Is this a USEPA "Hazardous Waste" per 40CFR 261.37

☐

Yes

☒

No

If "Yes", then please fill out the UHC Form

**Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)**

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No

If "Yes", then please list ALL applicable codes:

CESA 319

~~RECYCLABLE MATERIAL~~

Non PCNA - Non-DOT Regulated  
RQ: <sup>motor</sup>

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
NA		NA		NA mg/l		NA mg/l		NA <del>100</del> %	
Oil & Grease		TOC		Zinc		Copper		Nickel	
NA	mg/l	NA	mg/l	NA	mg/l	NA	mg/l	NA	mg/l

## SECTION 4: Physical and Chemical Data

[illegible]

## SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

ANALYTICAL

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.

see p. 101b 2934

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

None Known

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	0
TCLP Volatiles:	0
TCLP Semi-Volatiles:	0
Reactivity:	0
Corrosivity:	0
Ignitability:	0

**SECTION 9: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature:

Date:

8-12-08

Printed Name/Title:

EAC MCKAUGHAN / PRESIDENT

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer:

Date:

8-19-08

☒ Approved

☐ Rejected

Approval Number:

2935

**SECTION 10: Waste Receipt Classification Under 40 CFR 437**

Is this material a wastewater or wastewater sludge?

If 'Yes', complete this section.

☐ YES

☒ NO

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

\$35/dm

**2. Contamination Limits (maximum limit before surcharges apply):**

Non-Conforming-Reject

**3. Surcharge Pricing:**

None

**4. Special Testing Requirements:**

None

**5. Treatment and Handling Protocol:**

Class 1 Solids to landfill

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☐ Subcategory B

☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**7. Tests for Product Recovered/Recycled (if applicable):**

Na
----

**8. Management for Product Recovered/Recycled (if applicable):**

Na
----

2936

Jet Lube



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 8/21/2008

Dear George Mueller

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # 2936

Expiration Date 8/21/2010

Generator: Jet Lube

Address: 4849 Homestead Road  
Houston, TX 77226

### Waste Information

Name of Waste: Line flushes

TCEQ Waste Code #: CESQ6091

Container Type:

Detailed Description of Process Generating Waste:

Nonhazardous sludge from flushing product lines

Color: varies

Odor: slight

pH: na

Physical State:

Incompatibilities: strong acids, strong oxidizers such as liquid chlorine, concentrated oxygen, sodium hypochlorite, calcium hypochlorite, etc.

Safety Related Data/Special Handling:

std ppe

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000655

GRP  
OK

DC



4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

**SECTION 1: Generator Information**

Company: Jet Lube  
Address: 4849 Homestead Road  
City: Houston State: TX Zip: 77028  
Contact: George Mueller Title: Plant Manager  
Phone Number: 713-674-7617 Fax Number: 713-672-4685  
24/hr Phone Number: 281-989-8694  
US EPA ID No: TXCESQG  
State ID No: CESQG SIC Code: NA

**SECTION 2: Billing Information - ☒ Same as Above**

Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Contact: \_\_\_\_\_ Title: \_\_\_\_\_  
Phone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_

**SECTION 3: General Description of the Waste**

Name of Waste: Line Flushes  
Detailed Description of Process Generating Waste:

Non hazardous sludge from flushing product lines

Physical State: ☐ Liquid ☒ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: varies Odor: slight

Specific Gravity (water=1): .9-1.1 Density: 7.5-9.17 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☐ Single-phase ☒ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☒ Yearly ☒ One-Time

Quantity: 300

☐ Yes ☒ No

**If “Yes”, Is it:**

☐ D003 (Reactive)

☐ D009

☐ D011

☐ Yes☒ No

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No

☐ Yes☒ No

**If "Yes", then please list ALL applicable codes:**

CE506091

Non RCRA Non DOT Regulated Waste Sludge

**Class:** NA

UN/NA:

NA

**PG :**

NA

**RQ:**

NA

#### **SECTION 4: Physical and Chemical Data**

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS Sheets

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

Strong acids, strong oxidizers such as liquid chlorine, concentrated oxygen, sodium hypochlorite, calcium hypochlorite, etc

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	<u>X</u>
TCLP Volatiles:	<u>X</u>
TCLP Semi-Volatiles:	<u>X</u>
Reactivity:	<u>X</u>
Corrosivity:	<u>X</u>
Ignitability:	<u>X</u>

**SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)**

Is this material a wastewater or wastewater sludge?  
If 'Yes', complete this section.

☐ YES ☒ NO

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.**

**Metals Subcategory : Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory : Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

**SECTION 10 Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

**SECTION 11: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature:

*George Mueller*

Date:

8/2/08

Printed Name/Title:

GEORGE MUELLER PLANT MANAGER

**CES USE ONLY (DO NOT WRITE IN THIS SPACE)**

Compliance Officer:

*Robert J. Hyatt*

Date:

8-21-08

☒ Approved

☐ Rejected

Approval Number:

2936

**SECTION 4: Physical and Chemical Data**

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials ✓	Ranges are acceptable	or %
1200 Pale Base Oil ✓	0-100	%
Hydrocal 100 ✓	0-100	%
SUNPAR 2280 ✓	0-100	%
SR 130 ✓	0-100	%
Royal Purple Thermax Semi-Fluid Grease ✓	0-100	%
#202 Moly Lith ✓	0-100	%
ALCO-EP-73 PLUS ✓	0-100	%
Aluminum Complex Base Grease ✓	0-100	%
Artic Base ✓	0-100	%
CA Blue HT Grease ✓	0-100	%
Calcium Base Grease ✓	0-100	%
Jet Lube CB-2 ✓	0-100	%
DYNAGUARD BLUE ✓	0-100	%
Jet Lube Food Grade Base ✓	0-100	%
Jet Lube No. 33 ✓	0-100	%
JET-PLEX-EP ✓	0-100	%
Kiln Grease HT ✓	0-100	%
KORR-Guard ✓	0-100	%
Lithium Base Grease ✓	0-100	%
MARINE Multipurpose ✓	0-100	%
Marine Wire Rope and Hawser Grease ✓	0-100	%
MOLY EP 620 ✓	0-100	%
JET-LUBE NCS-30 ✓	0-100	%
XG-431 ✓	0-100	%
JET-LUBE C580 ECF ✓	0-100	%
CZ-EX PLUS ✓	0-100	%
DYNAGUARD E ✓	0-100	%
Fiber Grease ✓	0-100	%
Jacking System Grease ✓	0-100	%
JET-LUBE NCS-30 ECF ✓	0-100	%
JET-LuBE Seal-Guard ECF ✓	0-100	%
Sulfonate Complex Base ✓	0-100	%
Tensioner Grease ✓	0-100	%
TF-15 Concentrate ✓	0-100	%
Royal Purple Synthetic Base ✓	0-100	%
White Lithium Grease ✓	0-100	%



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**1. Base Pricing (including freight):**

\$45.00/drum disposal, \$70.00/hour freight

**2. Contamination Limit (maximum limit before surcharges apply):**

None

**3. Surcharge Pricing:**

None

**4. Special Testing Requirements:**

None

**5. Treatment and Handling Protocol:**

Put in class 1 box ; If material can process to Black oil or base oil then talk to the oil processing manager.

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A    ☐ Subcategory B    ☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**7. Tests for Product Recovered/Recycled (if applicable):**

NA
----



**8. Management for Product Recovered/Recycled (if applicable)**

NA
----

# Material Safety Data Sheet

MSDS No.  
AP0502

## 1200 PALE BASE OIL

HMIS	IMPORTANT: Read this MSDS before handling and disposing of this product and pass this information on to employees, customers, and users of this product.	Protective Equipment						
<table><tr><td>Health Hazard</td><td>*0</td></tr><tr><td>Fire Hazard</td><td>1</td></tr><tr><td>Reactivity</td><td>0</td></tr></table> <p>= Chronic Health Hazard</p>	Health Hazard	*0	Fire Hazard	1	Reactivity	0	<p>This product is covered by the OSHA Hazard Communication Standard and this document has been prepared in accord with the MSDS requirements of the rule.</p>	 
Health Hazard	*0							
Fire Hazard	1							
Reactivity	0							

### SECTION 1: IDENTIFICATION

Trade Name	1200 Pale Base Oil	MSDS No.	AP0502
Product Number	1757417574	Revision Date	6/11/96
CAS Number	64742-52-5		
Synonyms	1,200 SUS at 100°F Naphthenic Base Stock; 1200 Naphthenic Oil; 1200 Coastal Oil.		
Generic Name	Severely Hydrotreated Heavy Naphthenic Distillate (Petroleum)		
Chemical Family	Petroleum Hydrocarbons		
Manufacturer	Lyondell Lubricants 12000 Lawndale Avenue P.O. Box 2451 Houston, Texas 77252-2451	Telephone Numbers	800/424-9300 CHEMTREC 800/313-7645 Company Hot Line 800/447-4572 Customer Inquiries 800/525-4692 MSDS Requests

### SECTION 2: COMPOSITION

Component Name	CAS Number	Carcinogenic Listings	Concentration Wt%
SEVERELY HYDROTREATED HEAVY NAPHTHENIC DISTILLATE	64742-52-5	Not applicable	EQ 100

### SECTION 3: HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Signal Word	CAUTION!	Color	Dark yellow to amber.
Physical State	Liquid.	Odor	Hydrocarbon lube oil.
Physical and Health Hazards	May cause skin irritation and inflammation following extended contact! Potential slipping hazard on smooth, hard walking area.		
Environmental Hazards	Ecological effects testing has not been conducted on this product. If it were spilled, no significant detrimental effects would be expected to occur.		

#### POTENTIAL HEALTH EFFECTS

Routes of Exposure Skin contact.

#### Signs and Symptoms of Acute Exposure

- *Inhalation* No significant adverse health effects are expected to occur upon short-term exposure.
- *Eye Contact* No eye irritation is expected to occur from short-term exposure. This is based upon animal test results for similar products with higher and lower viscosities.
- *Skin Contact* No skin irritation is expected to occur upon short-term exposure. This is based upon animal test results for similar products with higher and lower viscosities.

• Ingestion	Ingestion is unlikely. If swallowed, no significant adverse health effects are expected to occur from short-term exposure; however, it might cause a laxative effect.
Chronic Health Effects Summary	Prolonged and/or repeated contact may produce minimal to mild skin irritation and inflammation. See Section 11.
Conditions Aggravated by Exposure	Personnel with pre-existing skin disorders should avoid contact with this product.
Target Organs	Skin.
Carcinogenic Potential	Please refer to Section 2 for the identification of components, if any, which have been identified as having carcinogenic potential.

#### SECTION 4: FIRST AID MEASURES

Inhalation	Vaporization is not expected at ambient temperatures. This material is not expected to be an inhalation problem under anticipated conditions of use. In case of overexposure, move the person to fresh air.
Eye Contact	Flush eyes with clean, low-pressure water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If pain or redness persists after flushing, obtain medical attention.
Skin Contact	Remove by wiping the oil off the skin; and then, wash skin thoroughly with plenty of mild soap and water. Remove contaminated clothing and thoroughly clean it before reuse. Discard contaminated leather gloves and shoes.
Ingestion	Swallowing less than a half-cup is not expected to cause harm. If any larger volume of this product is swallowed and the patient is conscious and alert, give quantities of water and induce vomiting. If irritation, discomfort, or vomiting occurs, immediately obtain medical attention.
Notes to Physician	Treat symptomatically.

#### SECTION 5: FIRE FIGHTING MEASURES

##### FLAMMABLE PROPERTIES

Flammability Classification	Slightly Combustible! OSHA/NFPA Class-IIIB Combustible Liquid.
Flash Point/Method	AP 390° to 420°F (200° to 215°C) by ASTM D-92.
Flammable Limits %	LEL: AP 1.0 UEL: AP 7.0 (At or approaching the Flash Point.)
Auto-Ignition Temperature	AP 750°F (400°C) (Estimated)
Hazardous Combustion Products	Burning or excessive heating may produce smoke, Carbon Monoxide, Carbon Dioxide, and possibly other harmful gases/vapors.
Special Properties	When heated above its flash point temperature, this material will release flammable vapors which, if exposed to an ignition source, can burn in the open or be explosive in confined spaces. Mists or sprays may be flammable at temperatures below the flash point.

##### EXTINGUISHING MEDIA

SMALL FIRE: Use dry chemicals, Carbon Dioxide (CO<sub>2</sub>), foam, water fog, or inert gas (Halon or Nitrogen). LARGE FIRE: Use water fog, waterspray, or foam. Foam and water are effective but may cause frothing. NEVER use a water jet because it may spread the fire to a larger area.

**FIRE FIGHTING INSTRUCTIONS**

For fires involving this material, do not enter any enclosed or confined fire space without proper protective clothing and respiratory protective equipment. This may include supplied air or a NIOSH/MSHA-approved self-contained breathing apparatus (SCBA) to protect against the hazardous effects of combustion products and/or Oxygen deficiencies. Cool tanks and containers exposed to fire with water. Burning liquid will float on water. Notify the appropriate authorities if liquid(s) enter sewers or waterways.

**SECTION 6: ACCIDENTAL RELEASE MEASURES****Small Spills**

Contain spill and prevent it from entering all bodies of water, if possible. Safely stop flow of spill. Evacuate non-essential personnel from immediate area due to slipping hazard. Maximize product recovery for reuse or recycling. Absorb spill with inert material (e.g., dry sand, earth, or other non-combustible absorbents) and place in a chemical waste container for later disposal. In urban areas, cleanup spill as soon as possible; in natural environments, cleanup on advice from ecologists. This material will float on water. Absorbent pads and similar materials can be used. The spilled material and any soil or water which it has contacted may be hazardous to animal and/or aquatic life. Comply with all laws and regulations.

**Large Spills**

Secure the area and control access. Verify that responders are properly HAZWOPER-trained and wearing appropriate protective clothing/equipment, including organic respirators or supplied air. Dike far ahead of a liquid spill to ensure complete collection. Pick up free liquid for recycle and/or disposal if it can be accomplished safely. All spills into U.S. navigable waterways need to be reported to the National Response Center (800/424-8802).

**SECTION 7: HANDLING and STORAGE****Handling**

Remove spillage immediately from hard, smooth walking areas. Avoid oxidizing agents. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated breathing of mist. Use only with adequate ventilation/personal protection. Wash thoroughly after handling. Prevent contact with food, chewing, or smoking materials. Do not take internally.

**Storage**

Keep container tightly closed. Keep it in a dry, cool, well-ventilated place. Combustible materials should be stored away from extreme heat, radiation sources, and strong oxidizing agents. DO NOT puncture, incinerate, or store containers at temperatures above 120°F (49°C) or in direct sunlight.

To avoid product degradation, water contamination should be avoided and minimum feasible handling temperatures should be maintained. Periods of exposure to high temperatures (GT 200°F.) should be minimized. Product degradation might increase health hazard risks.

**SECTION 8: EXPOSURE CONTROLS and PERSONAL PROTECTION****ENGINEERING CONTROLS**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the pertinent exposure limits (see below.). Ensure that an eyewash station and safety shower are near to the work-station location.

**PERSONAL PROTECTIVE EQUIPMENT****• Protective Equipment****• Eye Protection**

Safety glasses should be adequate protection under most conditions of use. Wear goggles and/or face shield if splashing or spraying is likely, especially if material is heated above 125°F (or 51°C). Have suitable eye wash water available.

• *Skin Protection*  
- *Hands*

Gloves (disposable, Vinyl, Nitrile, or Neoprene). Avoid skin contact or wear impervious protective clothing. Before eating, drinking, smoking, use of toilet facilities, or leaving work, wash hands with plenty of mild soap and water.

- *Body*

If conditions (splashing or spraying) present potential for exposure, clean and impervious protective clothing (Neoprene or Tyvek) such as long sleeves, apron, or lab coat should be worn. When handling heated material, also be sure to wear heat-resistant gloves and boots. If significant contact occurs, promptly take a shower. Remove oil-soaked clothing as soon as possible and launder thoroughly before reuse. Discard contaminated leather gloves/shoes.

• *Respiratory Protection*

None is needed under anticipated use conditions with adequate ventilation. If exposure approaches or exceeds the occupational exposure limits shown below, wear proper NIOSH/MSHA-approved vapor control respiratory equipment.

• *General Comments*

Since specific exposure standards/control limits have not been established for this product, the "Oil Mist, Mineral" exposure limits shown below are suggested as minimum control guidelines.

### EXPOSURE GUIDELINES

Substance	Source	Date	Type	Value	Time
OIL MIST, MINERAL	OSHA	1989	PEL	5 mg/M3	8 Hours
OIL MIST, SEVERELY-REFINED MINERAL	ACGIH	1995	TLV	5 mg/M3	8 Hours

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid.		
Color	Dark yellow to amber.		
Odor	Hydrocarbon lube oil.		
pH	Not applicable.		
Vapor Pressure	LT 0.1 mm of Hg at 70°F.	Viscosity	AP 1,100 to 1,350 SUS at 100°F. (ASTM D-2161)
Vapor Specific Gravity	GT 10 when Air = 1.0 at 70°F.	Melting/Freezing Pt.	LT 10°F (-12°C) (ASTM D-97)
Volatile Characteristics	Negligible (LT 0.1 Wt.%)	Solubility in Water	Negligible (LT 0.1 Wt.%)
Boiling Point/Range	GT 625°F (330°C) (ASTM D-86)	Specific Gravity	AP 0.92 to 0.94 (ASTM D-1250)
Additional Properties	Viscosity Index = AP 35 (ASTM D-2270); Average Calculated Density = AP 7.768 lbs./gal.; Kinematic Viscosity = AP 200 to 250 cSt at 40°C (and 12 to 14 cSt at 100°C) (ASTM D-445); Saybolt Viscosity = AP 70 to 80 SUS at 210°F (ASTM D-2161); Aniline Point Temperature = AP 190°F (88°C) (ASTM D-611); Sulfur Content = LT 0.20 Wt. % (ASTM D-2622).		

### SECTION 10: STABILITY AND REACTIVITY

Chemical Stability	Stable.
Conditions to Avoid	Extreme heat and open flame.
Incompatibility with Other Materials	Strong acids, alkalis, and oxidizers such as liquid Chlorine and Oxygen.
Hazardous Decomposition Products	Burning or excessive heating may produce smoke, Carbon Monoxide, Carbon Dioxide, and possibly other harmful gases/vapors.
Hazardous Polymerization	Not expected to occur.

**SECTION 11: TOXICOLOGICAL INFORMATION**

Under normal anticipated conditions of use, this product should not present a risk to human health.

**High-viscosity, Severely Hydrotreated Heavy Naphthenic Distillates:**

GAS (LC50): Acute: GT 5.0 mg/L (Rat screen level).  
 ORAL (LD50): Acute: GT 5,000 mg/kg (Rat screen level).  
 DERMAL (LD50): Acute: GT 2,000 mg/kg (Rabbit screen level).  
 DRAIZE EYE: Acute: Non-irritating (Rabbit).  
 DRAIZE DERMAL: Acute: Non-irritating (Rabbit).  
 BUEHLER DERMAL: Acute: Non-sensitizing (Guinea Pig).  
 28-Day DERMAL: Sub-Chronic: Minimal to mild skin irritant (Rabbit).  
 104-Week DERMAL: Chronic: No skin tumors at site of application (Mouse).  
**MUTAGENICITY:**  
 modified Ames Assay: Negative (Salmonella typhimurium).  
 in-vitro SCE Ovary Assay: No toxicity = no test (Chinese Hamster).  
 in-vitro Lymphoma Assay: Negative or no toxicity (Mouse).

The International Agency for Research on Cancer (IARC), one of the Occupational Safety and Health Association's (OSHA) authorities for establishing carcinogenic potential, has specifically evaluated Naphthenic Oils. IARC found that Mildly Hydrotreated (Hydrofinished) Naphthenic Oils are carcinogenic to laboratory animals. **IARC has NOT found Severely Hydrotreated Naphthenic Oils to be carcinogenic. This product is classified as Severely (Not Mildly) Hydrotreated under both IARC and OSHA definitions.**

Lifetime mouse skin painting studies indicated this product is NOT mutagenic or carcinogenic.

**SECTION 12: ECOLOGICAL INFORMATION**

Ecological effects testing has not been conducted on this product. If it were spilled, no significant detrimental effects would be expected to occur.

Petroleum-based oils will normally float on water. If the oil layer covers a large area, especially in stagnant or slow-flowing waterways, the dissolved Oxygen content of the water may be depleted over time and lead to adverse effects on fish and other aquatic life.

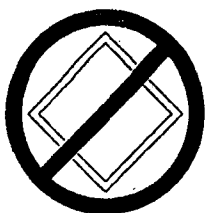
**SECTION 13: DISPOSAL CONSIDERATIONS**

Maximize product recovery for reuse or recycling. Conditions of use may cause this material to become a "hazardous waste", as defined by state or federal laws. Use approved storage, treatment, transporters, and disposal sites in compliance with all applicable regulations. If spill is introduced into a wastewater treatment system, chemical and biological oxygen demand will likely increase. Spill material is biodegradable if gradually exposed to microorganisms, preferably in an aerobic environment. Potential treatment and disposal methods include land farming, incineration, and land disposal, if permitted.

**SECTION 14: TRANSPORT INFORMATION**

<b>DOT Status</b>	Not a U.S. Department of Transportation regulated material.		
<b>Proper Shipping Name</b>	Not a D.O.T. "Hazardous Material".		
<b>Hazard Class</b>	Not regulated.		
<b>UN/NA ID</b>	Not applicable.	<b>Packing Group(s)</b>	Not applicable.
<b>Reportable Quantity</b>	Not applicable.		

Placards

Emergency Response  
Guide Number

Not applicable.

HAZMAT STCC  
Number

Not applicable.

MARPOL III Status

Not applicable.

**SECTION 15: REGULATORY INFORMATION**

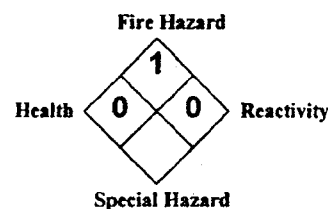
TSCA	All components of this product are listed on the Toxic Substance Control Act (TSCA) inventory.
SARA 304	The <b>Superfund Amendments and Reauthorization Act of 1986 (SARA)</b> Title III requires emergency planning based on <b>Threshold Planning Quantities (TPQs)</b> and release reporting based on <b>Reportable Quantities (RQs)</b> in 40 CFR 355 (used for SARA 302, 304, 311 and 312). No chemical components present in this product exceed the de minimus reporting level established under this statute.
SARA 311/312	The Superfund Amendments and Reauthorization Act of 1989 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This product would be classified under the following hazard categories: <b>Delayed (Chronic) Health Hazard</b>
SARA 313	The <b>Superfund Amendments and Reauthorization Act of 1986 (SARA)</b> Title III requires submission of an annual " <b>Toxic Chemicals</b> " Release Inventory report under 40 CFR 372. Chemical substances that must be accounted for under SARA Section 313 must also be identified in all product MSDSs that are impacted by the regulation. No chemical components present in this product exceed the de minimus reporting level established under this statute.
CERCLA	The <b>Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)</b> requires notification of the National Response Center concerning release of quantities of " <b>Hazardous Substances</b> " equal to or greater than the <b>Reportable Quantities (RQs)</b> listed in 40 CFR 302.4. No chemical components present in this product are subject to the reporting requirements under this statute.
California Proposition 65	Per the <b>California Safe Drinking Water and Toxics Enforcement Act of 1986</b> , this product DOES NOT contain any known ingredients for which the State of California has found to cause cancer, birth defects, or other reproductive harm, which requires a warning under the statute.
Additional Regulatory Remarks	No additional comments.

**SECTION 16: OTHER INFORMATION**

HMIS (U.S.A.)

Health Hazard	*0
Fire Hazard	1
Reactivity	0

= Chronic Health Hazard

National Fire  
Protection  
Association (U.S.A.)DISCLAIMER OF LIABILITY

"The information on this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied regarding its correctness.

Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself.

The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with handling, storage, use or disposal of the product.

This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable."

#### REVISION INFORMATION

Version Number	08
Revision Date	6/11/96
Revision History	Converted to ANSI 16-section format on 6/11/96. Additional comments were incorporated into all Sections of this MSDS.
Print Date	Printed on 6/20/96.

#### ABBREVIATIONS

EQ = Equal	LT = Less Than	GT = Greater Than	AP = Approximately
NA = Not Applicable		ND = No Data	

\*\*\*\*\* END OF MSDS \*\*\*\*\*

# MSDS Document

## Product Hydrocal 100

### 1. Chemical Product and Company Identification

Trade Name of this Product Hydrocal 100

Arctic oil

Synonyms: 1120-00

MSDS ID 1120-00

**Manufacturer**Calumet Lubricants Company  
2780 Waterfront Pkwy E. Suite 200  
Indianapolis, IN 46214**Contact Name**

Anne Goldsmith

**Phone Number**

(317) 328-5660

**Emergency Phone**

CHEMTREC (800) 424-9300

Revision Date 02/03/03

Health	0
Env	1
Specific	0

### 2. Composition and Information on Ingredients

Ingredient	CAS Number	Weight %	ACGIH TLV	PEL	STEL
Heavy Hydrotreated Naphthenic Distillates (petroleum)	64742-52-5	100.0 %	5	5	

### 3. Hazard Identification

**Hazards**

This product is a clear, pale-straw to water-white, viscous liquid. It has a light petroleum odor.

This product is slightly combustible (Flammability Class IIIB) but will burn. Heated product will produce colorless vapors. Heated vapors in the presence of an ignition source can be explosive if confined. When burned, the product will produce carbon monoxide and other asphyxiants during combustion.

Prolong unprotected exposure to this product will cause skin irritation. Material splashed in

eyes will irritate tissues. Gently flush material from eyes with clean water. Remove product soaked clothing and wash with mild soap.

As with any petroleum product, avoid mixing this product with strong oxidizers.

Carcinogen listed by: National Toxicology Program (NO)

I. A. R. C. (NO)

OSHA (NO)

ACGIH (NO)

This product does not require a cancer hazard warning in accordance with the OSHA Hazard Communication Standard.

#### MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Personnel with pre-existing skin disorders should avoid contact with this product.

Health studies have shown that many petroleum hydrocarbons and synthetic lubricants pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized.

## 4. First Aid Information

### First Aid Measures

#### EYES

If splashed into eyes, flush with clear water for 15 minutes or until irritation subsides. If irritation persists, call a physician.

#### SKIN

In case of skin contact, remove any contaminated clothing and wash skin with soap and water. Launder or dry-clean clothing before reuse. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury. Prolonged or repeated skin contact may cause skin irritation.

#### INGESTION

Product is practically non-toxic. Do not induce vomiting. Obtain emergency medical attention.

#### INHALATION

Vapor pressure is very low. Vapor inhalation under ambient conditions is normally not a problem. If overcome by vapor from hot product, immediately remove from exposure and call a physician. If breathing is irregular or has stopped, start resuscitation; administer oxygen, if available. If overexposed to oil mist, remove from exposure until excessive oil mist condition subsides.

## 5. Fire Fighting Measures

Flash Point  
FP Method

> 320 F  
ASTM D92

### **Fire Fighting**

#### **FIRE AND EXPLOSION HAZARDS**

Slightly combustible. OSHA/NFPA Class IIIB Combustible Liquid. If heated above its flash point will release flammable vapors which can burn in the open or be explosive in confined spaces if exposed to ignition source. Mists or sprays may be flammable below oils normal flash point. Keep away from extreme heat or open flame.

#### **EXTINGUISHING MEDIA**

Foam, water spray (fog), dry chemical, carbon dioxide, and vaporizing liquid type extinguishing agents may all be suitable for extinguishing fires involving this type of product, depending on size or potential size of fire and circumstances related to the situation. Plan fire protection and response strategy through consultation with local fire protection authorities or appropriate specialists.

The following procedures for this type of product are based on the recommendations in the National Fire Protection Association's "Fire Protection Guide on Hazardous Materials", Tenth Edition (1991):

Use water spray, dry chemical, foam or carbon dioxide to extinguish the fire. Use water to keep fire-exposed containers cool. If a leak or spill has not ignited, use water spray to disperse the vapors and to provide protection for persons attempting to stop a leak. Water spray may be used to flush spills away from exposures. Minimize breathing of gases, vapor, fumes or decomposition products. Use supplied-air breathing equipment for enclosed or confined spaces or as otherwise needed.

#### **DECOMPOSITION PRODUCTS UNDER FIRE CONDITIONS**

Fumes, smoke, carbon monoxide, aldehydes and other decomposition products, in the case of incomplete combustion.

#### **FLAMMABLE PROPERTIES**

FLASH POINT: >320°F >160°C COC ASTM D92  
AUTO IGNITION: >650°F >343°C  
FLAMMABILITY CLASS: IIIB

## **6. Accidental Release Measures**

### **Release Measures**

Extinguish any open flames and remove heat sources.

This material will float on water and will be transported by stormwater runoff. Spills to the ground should be immobilized and removed immediately. Spills to watercourses such as stormdrains, sewers, ditches, streams, ponds, etc. must be contained with dikes, dams, floating booms, pads, etc. as appropriate. Remove trapped product immediately.

Spills that enter a waterbody must be immediately reported to the USEPA's National Response Center at (800)546-2972.

Check with your local and state regulators regarding their reporting requirements.

Cleanup personnel should wear appropriate personnel protective equipment including impervious clothing, rubber boots, gloves, and splash goggles.

## 7. Handling and Storage

### Handling and Storage

#### HANDLING AND STORAGE PRECAUTIONS

Keep away from flames, sparks or hot surfaces. Never use a torch to cut or weld on or near container. Empty oil containers can contain explosive vapors. NFPA Class IIIB storage. Wash thoroughly after handling.

#### WORK/HYGIENIC PRACTICES

Wash hands with soap and water before eating, drinking, smoking or use of toilet facilities. Do not use gasoline, solvents, kerosene, or harsh abrasive skin cleaners for washing exposed skin areas. Take a shower after work if general contact occurs. Remove oil-soaked clothing and laundry before reuse. Launder or discard contaminated shoes and leather gloves.

#### "EMPTY" CONTAINER WARNING

"Empty" containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

Do not attempt to refill or clean containers since residue is difficult to remove. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All other containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

For work on tanks refer to Occupational Safety and Health Administration regulations, ANSI Z49.1, and other governmental and industrial references pertaining to cleaning, repairing, welding, or other contemplated operations.

## 8. Exposure Controls and Personal Protection

### Exposure/PPE/Heavy

#### VENTILATION

Use local exhaust to capture vapor, mists or fumes, if necessary. Provide ventilation sufficient to prevent exceeding recommended exposure limit or buildup of explosive concentrations of vapor in air. No smoking, or use of flame or other ignition sources.

#### EYE/FACE PROTECTION

Use safety glasses or splash goggles when eye contact may occur. Have suitable eye wash water available.

#### SKIN PROTECTION

Avoid prolonged and/or repeated skin contact. If prolonged contact cannot be avoided, wear protective impervious gloves and clothing. Acceptable materials for gloves are polyvinyl chloride; neoprene; nitrile; polyvinyl alcohol; viton.

#### RESPIRATORY PROTECTION

Normally not required if adequate ventilation. If occupational exposure limits are exceeded wear NIOSH/MSHA approved apparatus.

#### OTHER/GENERAL PROTECTION

If there is a likelihood of splashing, an oil resistant clothing should be worn. Never wear oil soaked clothing. Launder or dry clean before wearing. Discard oil soaked shoes. Affix warning labels on containers in accordance with 29 CFR 1910.1200 (Hazard Communication Standard).

TRATION	CONCEN
INGREDIENT NAME	PERCENT
BY VOLUME	

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Heavy Hydrotreated Naphthenic Distillates (petroleum)  
100.0  
CAS NUMBER: 64742-52-5 Exposure Limits: OIL MIST  
OSHA PEL MIST 5 MG/M3 8 HRS  
ACGIH TLV MIST 5 MG/M3 8 HRS

## 9. Physical and Chemical Properties

Product CAS Number 64742-52-5  
Specific Gravity 0.8972  
Density lbs/Gal 7.49  
Molecular Weight 320

APPEARANCE: Clear, pale straw to water white, viscous liquid  
PHYSICAL STATE: Liquid  
BOILING POINT: IBP >526°F >274°C (D1160)  
MELTING POINT: -60°F -51°C (D97)  
VAPOR PRESSURE: <0.001 mm Hg @ 20°C  
VAPOR DENSITY (AIR=1): >5  
SPECIFIC GRAVITY: 0.8972 Water = 1  
MOLECULAR WEIGHT: 320.00  
SOLUBILITY (H2O): negligible  
VISCOSITY: 108.2 SUS @ 100°F

Physical data may vary slightly to meet specifications.

## 10. Stability and Reactivity

### Stability/Reactivity

STABILITY: Stable. Will not react violently with water.

### CONDITIONS TO AVOID

Sources of ignition.

### INCOMPATIBLE MATERIALS

Strong oxidizers such as liquid chlorine, concentrated oxygen, sodium hypochlorite, calcium hypochlorite, etc., as this presents a serious explosion hazard.

### HAZARDOUS DECOMPOSITION PRODUCTS

Combustion may produce carbon monoxide and other asphyxiants.

HAZARDOUS POLYMERIZATION: will not occur

## 11. Toxicological Information

### Toxicological

#### ACUTE STUDIES

Product has a low order of acute and dermal toxicity, but minute amounts aspirated into the lungs during ingestion or vomiting may cause mild to severe pulmonary injury and possibly death.

#### EYE EFFECTS

Product contacting the eyes may cause eye irritation.

#### SKIN EFFECTS

Prolonged or repeated skin contact with this product tends to remove skin oils, possibly leading to irritation and dermatitis; however, based on human experience and available toxicological data, this product is judged to be neither a "corrosive" nor an "irritant" by OSHA criteria.

#### ACUTE ORAL EFFECTS

Product has a low order of acute and dermal toxicity, but minute amounts aspirated into the lungs during ingestion or vomiting may cause mild to severe pulmonary injury and possibly death.

#### ACUTE INHALATION EFFECTS

Product has a low order of acute and dermal toxicity, but minute amounts aspirated into the lungs during ingestion or vomiting may cause mild to severe pulmonary injury and possibly death.

In accordance with the current OSHA Hazard Communication Standard criteria, this product does not require a cancer hazard warning. This is because the product is formulated from base stocks which are severely hydrotreated, severely solvent extracted, and/or processed by mild hydrotreatment and extraction. Alternatively, it may consist of components not otherwise affected by IARC criteria, such as atmospheric distillates or synthetically derived materials, and as such is not characterized by current IARC classification criteria.

## 12. Ecological Information

### Ecological Info

If applied to leaves, this product may kill grasses and small plants by interfering with transpiration and respiration. This product is not toxic to fish but may coat gill structures resulting in suffocation if spilled in shallow, running water. Product may be moderately toxic to amphibians by preventing dermal respiration. This product may cause gastrointestinal distress to birds and mammals through ingestion during pelage grooming.

This product is rapidly biodegradable. Biodegradation is possible within 90 to 120 days in aerobic environments at temperatures above 70°F (21°C).

## 13. Disposal Considerations

### Disposal

Product, as supplied, does not meet the characteristics of a hazardous waste as defined in

40 CFR 261.21-24. If mixed with other products, waste mixture must be characterized. DO NOT dispose of this product in drains or storm sewers. DO NOT dispose of this product in a landfill without prior solidification. Waste product should be recycled. Consider waste brokering.

#### 14. Transportation Information

##### Transport Info

PROPER SHIPPING NAME: Not regulated by DOT  
HAZARD CLASS: Not applicable  
DOT IDENTIFICATION NUMBER: N/A  
DOT SHIPPING LABEL: Not regulated by DOT

#### 15. Regulatory Information

##### Compliance

##### U.S. FEDERAL REGULATORY INFORMATION

SARA 302 Threshold Planning Quantity: NOT APPLICABLE

SARA 304 Reportable Quantity: NOT APPLICABLE

SARA 311 Categories: Immediate (Acute) Health Effects -N

Delayed (Chronic) Health Effects -Y

Fire Hazard -N

Sudden Release of Pressure -N

Reactivity Hazard -N

EPA/TSCA Inventory: The components of this product are listed on the EPA/TSCA inventory of chemicals.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA): No chemicals in this product are subject to the reporting requirements of CERCLA.

##### SARA TITLE III - SECTION 313 SUPPLIER NOTIFICATION

No chemicals in this product exceed the De Minimus reporting level established by SARA Title III, Section 313 and 40 CFR 372.

##### EUROPEAN (ECC) REGULATORY INFORMATION

This product is listed on the European Inventory of Existing Commercial Substances.

##### CANADIAN REGULATORY INFORMATION

This product is listed on the Canadian (DSL) Domestic Substances List.

WHMIS Classification: NOT CONTROLLED

##### EINECS/265-146-1

This product is listed on the European Inventory of Existing Commercial Substances under EINECS No. 265-146-1. This Product has an IP 346 value of <3%. This product is not required to be labeled according to the European Directive 67/548/EEC.

#### 16. Other Information

##### Disclaimer

DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES

The information contained herein is based upon data believed to be reliable and reflects our best professional judgment. Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained therein and assume no responsibility regarding the suitability of this information for the user's intended purpose or for the consequence of its use. Each individual should make a determination as to the suitability of the information for his/her particular purpose(s).

Supersedes MSDS dated: 07/12/2001

Revisions:



C007  
4-10-08

## MATERIAL SAFETY DATA SHEET

### 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

**Product Name:** SUNPAR 2280

**Manufacturer Information:**

Sunoco, Inc. (R&M)  
1735 Market Street LL

Philadelphia, Pennsylvania, 19103-7583

**Product Use:**

Process Oil

**Emergency Phone Numbers:**

Chemtrec (800) 424-9300  
Sunoco Inc. (800) 964-8861

**Information:**

Product Safety Information (610) 859-1120

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Amount (Vol%)
SEVERELY SOLVENT REFINED RESIDUUM	64742-01-4	100 - 100

**EXPOSURE GUIDELINES (SEE SECTION 15 FOR ADDITIONAL EXPOSURE LIMITS)**

CAS No.	Governing Body	Exposure Limits

### 3. HAZARDS IDENTIFICATION

• **EMERGENCY OVERVIEW**

Warning! Heated material may cause injury.

**Hazards Ratings:**

Key: 0 = least, 1 = slight, 2 = moderate, 3 = high, 4 = extreme

	Health	Fire	Reactivity	PPI
NFPA	0	1	0	
HMIS	0	1	0	X

• **POTENTIAL HEALTH EFFECTS**

• **PRE-EXISTING MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE**

The following diseases or disorders may be aggravated by exposure to this product: skin,

• **INHALATION**

No acute effects expected.

LC50 (mg/l): no data  
LC50 (mg/m3): no data  
LC50 (ppm): no data

▪ **SKIN**

Practically non-toxic if absorbed through the skin. Substance may cause slight skin irritation. Contact with heated product may cause thermal burns.

Draize Skin Score: no data

Out of 8.0

LD50 (mg/kg): no data

▪ **EYES**

Contact with product at elevated temperatures can result in thermal burns.

▪ **INGESTION**

Practically non-toxic if ingested.

LD50 (g/kg): no data

#### **4. FIRST AID MEASURES**

• **INHALATION**

No specific treatment is necessary since this material is not likely to be hazardous by inhalation. If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.

• **SKIN**

Wash with soap and water for 20 minutes. Get medical attention if irritation develops or persists. Wash clothing before reuse. For contact with heated product, flush immediately with plenty of cool water for at least 20 minutes. Get medical attention.

• **EYES**

Immediately flush eyes with plenty of water. Get medical attention, if irritation persists. For contact with heated product, flush immediately with plenty of cool water for at least 20 minutes. Get medical attention.

• **INGESTION**

Material is practically non-toxic. Induction of vomiting is not required. Get medical attention immediately.

#### **5. FIRE FIGHTING MEASURES**

• **EXTINGUISHING MEDIA**

Water spray; Regular foam; Dry chemical; Carbon dioxide;

• **FIRE FIGHTING INSTRUCTIONS**

Wear structural fire fighting gear. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### **FLAMMABLE PROPERTIES**

	Typical	Minimum	Maximum	Text Result	Units	Method
Flash Point				561 MINIMUM COC	F	N/A
Autoignition Temperature				no data	F	N/A
Lower Explosion Limit				no data	%	N/A
Upper Explosion Limit				no data	%	N/A

#### **6. ACCIDENTAL RELEASE MEASURES**

Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Use appropriate personal protective equipment as stated in Section 8 of this MSDS. Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Vacuum or sweep up material and place in a disposal container.

Advise the Environmental Protection Agency (EPA) and appropriate state agencies, if required. In Canada, advise the Ministry of the Environment, if required.

## **7. HANDLING AND STORAGE**

- **HANDLING**  
Wash thoroughly after handling.
- **STORAGE**  
NFPA class IIIB storage. Flash point is greater than 200 degrees F.

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Consult With a Health and Safety Professional for Specific Selections

- **ENGINEERING CONTROLS**  
No special ventilation requirements.
- **PERSONAL PROTECTION**
  - **EYE PROTECTION**  
Splash proof chemical goggles or full face shield recommended to protect against splash of product.
  - **GLOVES or HAND PROTECTION**  
Protective gloves are recommended when prolonged skin contact cannot be avoided.
  - **RESPIRATORY PROTECTION**  
Concentration in air determines the level of respiratory protection needed. Use only NIOSH certified respiratory equipment. Respiratory protection is not usually needed unless product is heated or misted.. Half-mask air purifying respirator with dust / mist filters or HEPA filter cartridges is acceptable for exposures to ten (10) times the exposure limit. Full-face air purifying respirator with dust / mist filters or HEPA filter cartridges is acceptable for exposures to fifty (50) times the exposure limit. Protection by air purifying respirators is limited. Use a positive pressure-demand full-face supplied air respirator or SCBA for exposures greater than fifty (50) times the exposure limit. If exposure is above the IDLH (Immediately Dangerous to Life and Health) or there is the possibility of an uncontrolled release, or exposure levels are unknown, then use a positive pressure-demand full-face supplied air respirator with escape bottle or SCBA.
  - **OTHER**  
Remove contaminated clothing and wash before reuse. No special protection is normally needed for non-fire emergencies.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical Property	Typical	Units	Text Result	Reference
Appearance		N/A	DARK VISCOUS FLUID	
Boiling Point		F	no data	
Bulk Density		lb/gal	no data	
Melting Point		F	no data	
Molecular Weight		g/mole	no data	
Octanol/Water Coefficient		N/A	no data	
pH		N/A	no data	
Specific Gravity	0.89	N/A		
Solubility In Water		wt %	NIL	
Odor		N/A	LITTLE	
Odor Threshold		ppm	no data	
Vapor Pressure		mmHg	< 0.0001	@ 20 C

Viscosity (F)	2582	SUS		@ 100 F
Viscosity (C)	481	CsT		@ 40 C
% Volatile		wt %	NIL	

## **10. STABILITY AND REACTIVITY**

- **STABILITY**  
Stable
- **CONDITIONS TO AVOID**  
Avoid heat, sparks and open flame.
- **INCOMPATIBILITY**  
Strong oxidizers
- **HAZARDOUS DECOMPOSITION PRODUCTS**  
Combustion may produce carbon monoxide, carbon dioxide and other asphyxiants.
- **HAZARDOUS POLYMERIZATION**  
Will not polymerize.

## **11. ECOLOGICAL INFORMATION**

No data available

## **12. DISPOSAL CONSIDERATIONS**

Follow federal, state and local regulations. In Canada, follow federal, provincial and local regulations. This material is not a RCRA hazardous waste, if not contaminated. If material has been "used", RCRA criteria (ignitability, reactivity, corrosivity and toxicity) must be determined. Do not flush material to drain or storm sewer. Contract to authorized disposal service.

## **13. TRANSPORT INFORMATION**

<u>Governing Body</u>	<u>Mode</u>	<u>Proper Shipping Name</u>
DOT	Ground	Petroleum Lubricating Oil

<u>Governing Body</u>	<u>Mode</u>	<u>Hazard Class</u>	<u>UN/NA No.</u>	<u>Label</u>
DOT	Ground	N/A	N/A	Not Regulated

## **14. REGULATORY INFORMATION**

<u>Regulatory List</u>	<u>Component</u>	<u>CAS No.</u>
Inventory - Australia (AICS)	SEVERELY SOLVENT	64742-01-4
	REFINED RESIDUUM	
Inventory - Canada - Domestic Substances List	SEVERELY SOLVENT	64742-01-4
	REFINED RESIDUUM	
Inventory - China	SEVERELY SOLVENT	64742-01-4
	REFINED RESIDUUM	
Inventory - European EINECS Inventory	SEVERELY SOLVENT	64742-01-4
	REFINED RESIDUUM	
Inventory - Korea - Existing and Evaluated	SEVERELY SOLVENT	64742-01-4
	REFINED RESIDUUM	
Inventory - Philippines Inventory (PICCS)	SEVERELY SOLVENT	64742-01-4
	REFINED RESIDUUM	
Inventory - TSCA - Sect. 8(b) Inventory	SEVERELY SOLVENT	64742-01-4
	REFINED RESIDUUM	

### **Title III Classifications Sections 311,312:**

- Acute: **NO**
- Chronic: **NO**
- Fire: **NO**
- Reactivity: **NO**
- Sudden Release of Pressure: **NO**

### **15. OTHER INFORMATION**

This product is severely solvent-refined, contains less than 3% polycyclic aromatics by IP 346, and does not require chronic hazard warnings. Follow all MSDS/label precautions even after container is emptied because it may retain product residue. Limits for the product- 5mg/m3, Oil Mist Limit, (OSHA PEL/ACGIH TLV) WHMIS Classification: not controlled. Please refer to the material safety data sheet for complete information.



CO11  
2-26-08

Naphthenics Safety Data Sheet

2002-05-08

## SAFETY DATA SHEET

### Health, Environment & Safety Datasheet

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#### 1. Identification of the Substance/Preparation and the Company/Undertaking

Product Name: SR 130  
Product Type: Base Oil  
Supplier: Nynäs Naphthenics AB  
P. O. Box 10701  
S-121 29 STOCKHOLM, Sweden  
Telephone No.: +46-8-602 1200 Fax: +46-8-81 62 02  
Emergency Phone No.: +46-8-33 70 43

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#### 2. Composition/Information of Ingredients

Chemical Name:	CAS No.:	EEC No.:	Conc %:	Symbols/Phrases
Solvenrefined Heavy Naphthenic Distillate.	64741-96-4	265-097-6	100	-

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#### 3. Hazards identification

Classification:	No classification needed according to 67/548/EC and 1999/45/EC.
Human health:	Inhalation of vapours and/or mists might irritate respiratory tract. Prolonged skin contact will cause defatting and possible irritation. Eye contact might cause irritation.
Environment:	Slow biodegradation, the product will remain for long time in the
Physical and chemical	At elevated temperatures flammable vapours and

hazard: decomposition products will be released. Risk for slippery floors if spilled out.

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#### 4. First Aid Measures

Inhalation:	If inhalation of mists, fumes or vapours occur causing irritation,
Skin contact:	Remove immediately adhering matter and wash off with soap and
Eye contact:	Rinse with plenty of water.
Ingestion:	Clean mouth with water. Obtain medical advice if a large amount has been swallowed. Do not induce vomiting.

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#### 5. Fire-fighting Measures

Suitable extinguishing media:	Extinguish preferably with dry chemical, carbon dioxide(CO <sub>2</sub> ),or foam.Waterspray/mist may be used.
Extinguishing media safety reasons:	Water jet, unless used by authorised people.(Stain or risk caused by which must not be used combustion).

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#### 6. Accidental Release Measures

Personal precautions:	Suitable protection equipment should be used. In case of large spillage, the cleaning procedure should be carried out using suitable protective clothing such as overall, gloves and boots. Remove contaminated clothes as soon as possible. Smaller spillage can be wiped up with paper cloths, using protective gloves.
Environmental pre-cautions:	Prevent spills to enter and spread to drains, sewers, water courses, and soil. Contact local safety authorities.
Methods for cleaning up:	Absorb leaking product with sand, earth or other suitable inert

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#### 7. Handling and Storage

Handling:	Handle in accordance with good industrial hygiene and safety practices. If handled at elevated temperatures or with high speed
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Storage: Store at ambient temperature or with lowest necessary heating as handling requires.

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## 8. Exposure Controls/Personal Protection

Control parameters: Exposure via the air and normal handling.

Chemical name: Mineral oil.

Short term value: 5 mg/m<sup>3</sup>. TLV-TWA 8 hours ACGIH (1998).

Engineering measures to reduce exposure: Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.

Personal protection equipment:

Respiratory protection: If the product is heated under manual handling, use suitable mask with filter A1P2 or A2P2. Handling in automatic production lines, with exhaust or ventilation, will not require mask.

Hand protection: Wear oil-resistant protective gloves if there is a risk of repeated skin contact. Suitable gloves are neoprene, nitrile- or acrylonitrilebutadiene rubber, or PVC. Take notice of CEN 420:94, CEN 374:1-3:94 and CEN 388:94.

•Eye protection: Wear safety goggles / safe shield if splashes may occur.

•Skin and body protection: Wear protective clothing if there is a risk of skin contact and change them frequently, or when contaminated.

Hygienic measures: Act in accordance with good industrial hygiene and safety practice.

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## 9. Physical and Chemical Properties

Form: Viscous liquid.

Colour: <1.5, yellow

Odour: Odourless / light petroleum

Melting point/pour point: -27°C

Initial boiling point: >250°C

Density at 15°C:	908 kg/m <sup>3</sup>
Flash point, PM:	228°C
Auto ignition temp.:	>270°C
Solubility in water:	Non soluble.
Solubility in organic solvents:	Soluble
Decomposition temp.:	>280°C
Vapour pressure at 100°C:	160 Pascal
Calculated partition coefficient n-octanol/water, log P <sub>ow</sub> :	>6
Viscosity at 40°C:	144 cSt
DMSO extractable compounds according to IP 346:	< 3%
pH:	non relevant

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#### 10. Stability and Reactivity

Stability:	Stable at normal conditions. Start to decompose at 280°C or higher.
Avoid:	Excessive heating and highly oxidizing agents.
Hazardous decomposition products:	Flammable gases which might also be noxious.
temperatures	With air present, there is a risk for auto ignition at >270°C.

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#### 11. Toxicological Information

Acute toxicity:	Studies available indicate oral and dermal LD <sub>50</sub> s of >5 000 mg/kg
	which is considered as low acute toxicity.
Inhalation:	Prolonged and repeated inhalation of mist of vapour generated
	at elevated temperatures may irritate respiratory tract.
Oral:	May cause nausea and eventually vomiting and diarrhoea.
Skin contact:	Prolonged or repeated exposure may lead to defatting of the skin
	and subsequent irritation.

Eye contact:	May cause redness and transient pain.
Sensitisation:	Studies indicate no evidence of sensitisation.

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## 12. Ecological Information

Mobility:	Low, due to low water solubility.
Persistence/degrad- may not meet adability inherent, primary carbondioxide	The baseoil is not readily biodegradable. Substances criteria for ready biodegradability. Studies indicate biodegradation in the range of 20-60 % based on evolution.

Bio-accumulation: in fish. A value the hydrocarbon	Base oil has Log $P_{OW}$ in the range >3,9- >6,0. Log $P_{OW}$ is used for estimating the bioaccumulation > 3,0 indicates possible bioaccumulation. The size of molecules reduces the risk for bioaccumulation.
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Ecotoxicity: values of >1 000 environment.	Aquatic toxicity data on base oils indicate $LC_{50}$ shows no long-term hazard to the aquatic
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mg/l. w

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## 13. Disposal Considerations

Residues of unused product is not regarded as hazardous waste. Residues of products/packageing must not be disposed of in the environment, but taken care of in accordance with local regulations.

### Emptying instructions:

Barrels and equals: Turn the barrel upside down and tilt it approximately 10° until nondripping.

Nondripping is less than one drop / minute at 15 °C. The product viscosity depends on temperature,

and it is important that the emptying not is done at to low temperature.

It can be necessary to scrape out highviscous products.

When the barrel is nondripping send it for recycling. If the residue volume is more than 1% send

it for destruction of barrels. Empty barrels with < 1 % residue is not dangerous goods. Notify local regulations.

Bags for one way use/multiple use: Follow instructions given by the bag manufacturer. The last residues in the bag can be removed by placing the hose over the remaining residues or by lifting the bag so the product can run towards the hose. Bottom residues; roll up the bag towards the hose to press out the oil. One way bags of polyethylene can be recycled or disposed of by incineration. Notify local regulations.

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#### 14. **Transport Information**

The product is not classified as hazardous goods for land, sea and air transport according to the respective regulations (ADR, IMDG, IATA-DGR).

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#### 15. **Regulatory Information**

Classified according to European directives on classification of hazardous substances and preparations. Not classified as hazardous. No statutory label required.

Listed in TSCA (Toxic Substances Control Act) and EINECS.

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#### 16. **Other Information**

The information for labelling and ecotoxicity is according to Concawe Report No. 95/59, 98/54

01/53 and 01/54.

Classified according to the Dangerous Substance Directive, 67/548/EC up to the 28th ATP, the

Dangerous Preparation Directive 1999/45/EC, and the Safety Data Sheet Directive 2001/58/EC

The product is not classified as R 65 due to the exemption rule in the 22nd ATP of 67/548/EC.

The product has surface tension >33 mN/m at 25°C.

Product have DMSO extractible compounds according to IP 346 <3%.

Updated according to DSD, DPD and SDS as above. Latest update: 2002-06-30

Replacing revision date: 2000-09-01

Changes to previous version: Hazards Identification

Fire fighting measures

Exposure controls/ Personal protection

Physical and Chemical properties

Ecological information

Disposal Considerations

Regulatory Information

Other Information.

Notes from 28<sup>th</sup> ATP of Dangerous Substances Directive:

Nota L

\_\_\_\_\_ The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 w%w

DMSO extract as measured by IP 346. This Nota applies only to certain complex oil-derived substances in Annex I.

Nota N

The classification as a carcinogen need not apply if the full refining history is known and it can be shown that the

substance from which it was produced is not a carcinogen. This Nota applies only to certain complex oil-derived substances in Annex I.



# MATERIAL SAFETY DATA SHEET

4849 HOMESTEAD ROAD / P.O. BOX 21258 / HOUSTON, TEXAS 77226 / 713/674-7617 / TELEX 775393

HMIS/NFPA Health: 0 Fire: 1 Reactivity: 0 Personal Protection Index: N/A

## I. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

**Product Name:** ROYAL PURPLE THERMAX SEMI-FLUID GREASE  
**Chemical Family:** Synthetic lubricating grease.  
**Use:** Equipment lubrication.  
**Manufacturer/Supplier:** Jet-Lube, Inc.  
**Address:** 4849 Homestead Rd., Suite 200, Houston, TX, USA, 77028  
**Phone Number:** 713-674-7617 (FAX: 713-678-4604) 011-44-1224-211330 (U.K.)  
011-44-1628-31913 (England) (403) 463-7441 (Canada)  
**Emergency Phone Number:** (713) 674-7617 **Chemtrec (24-HRS U.S.A.):** (800) 424-9300

## II. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Nonhazardous Blend	9003296/82980549 103242/68411461	60-100	Unknown	Unknown	STEL: Unknown

## III. HAZARDS IDENTIFICATION

### MAIN HAZARDS - Health Effects

**Eyes:** May cause irritation. **Ingestion:** May cause diarrhea.  
**Skin:** Possible rash for persons with hypersensitivity.  
**Inhalation:** Viscous nature may block breathing passages if inhaled.

## IV. FIRST AID MEASURES

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help.  
**Skin:** Wash thoroughly with hand cleanser, followed by soap & water. All contaminated clothing should be dry cleaned before reuse.  
**Ingestion:** Consult physician.  
**Inhalation:** Clear air passage and seek medical help, if respiratory difficulty continues.

## V. FIRE FIGHTING MEASURES

**Extinguishing Media:** Foam, dry powder, halon, carbon dioxide, sand, earth & water mist.  
**Unsuitable Extinguishing Media:** Water jet.  
**Protective Equipment for Firefighting:** Self-contained breathing apparatus.

## VI. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Wear gloves & protective overalls.  
**Environmental Precautions:** Avoid disposal into drains.  
**Spillage:** Scrape up bulk, then pick up residue with diatomaceous earth to avoid a walking hazard.

## VII. HANDLING AND STORAGE

**Handling:** No special handling precautions necessary.  
**Storage:** Do not store at elevated temperatures.

## VIII. EXPOSURE CONTROL/PERSONAL PROTECTION

**Respiratory Protection:** None needed.  
**Hand Protection:** Protective gloves for hypersensitive persons.  
**Eye Protection:** Glasses, if applied to moving parts in motion  
**Body Protection:** Overalls.

## IX. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Semi-solid gel **Color:** Purple **Odor:** Mild **pH:** Neutral  
**Boiling Range/Point °F(°C):** >600 (316) **Melting Point °F(°C):** >500 (260)  
**Flash Point (COC) °F(°C):** >400 (204) **Autoignition Temperature °F(°C):** >500 (260)  
**Explosive Properties:** **LEL:** UN **UEL:** UN **Evaporation Rate (Butyl Acetate):** <0.01  
**Partition Coefficient (Log Pow):** Not applicable. **Vapor Pressure (kPa):** <0.01  
**Density (g/cm³):** 0.89 **Flammability:** Not flammable at ambient temperature.  
**Oxidizing Properties:** None **Water Solubility:** Not soluble  
**Vapor Density:** >5 **Percent Volatiles:** Nil **OAR Value:** Not Applicable (No Volatiles)

## X. STABILITY AND REACTIVITY

**Stability:** Chemically stable under normal conditions. No photoreactive agents.  
**Conditions to Avoid:** Powerful sources of ignition and extreme temperatures.  
**Materials to Avoid:** Strong inorganic & organic acids & oxidizing agents.  
**Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons and oxides of carbon, sulfur and nitrogen.  
Residue mainly comprised of soot & mineral oxides.

## XI. TOXICOLOGICAL INFORMATION

**Acute Toxicity:** Not known **Irritancy - Skin:** Very mild **Allergens:** None Known  
**Skin Sensitization:** Not known. **Sub-acute/Subchronic Toxicity:** Not known.  
**Chronic Toxicity:** None known. **Genotoxicity:** None known. **Carcinogens:** None  
**NTP:** No **IARC:** No **OSHA:** No **EC Classification (67/548/EEC):** No  
**California Prop 65 Agents:** None known  
**LC-50:** >4000 mg/kg (extrapolated from component data) **LD-50:** Not Applicable

## XII. ECOLOGICAL INFORMATION

**Possible Effects:** Unlikely to act as marine pollutant.  
**Behavior:** Relatively well behaved. Bioaccumulation potential nil.  
**Environmental Fate:** Highly unlikely to cause notable contamination. Nontoxic to marine or land organisms.

## XIII. WASTE DISPOSAL

**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice.  
**Container Disposal:** Pails without liner see "Product Disposal." Pails with Plastic Liner - pail can only be disposed of via standard waste disposal services, recycled or reused. Liner - see "Product Disposal."

## XIV. TRANSPORT INFORMATION

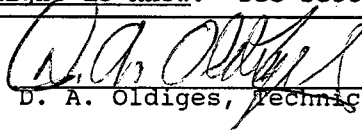
Not classified as hazardous for transport. **D.O.T.:** Nonhazardous  
**UN NO.:** Not Applicable **ROAD & RAIL TRANSPORT (ADR/RID):** Not Applicable  
**SEA TRANSPORT (IMO & IMDG):** Not Applicable  
**AIR TRANSPORT (ICAO & IATA):** Not Applicable

## XV. REGULATORY INFORMATION

**Labeling Information:** None needed. **S Phrases:** None applicable, as known.  
**R Phrases:** R22 harmful if swallowed. **EC Annex 1 Classification:** Not Applicable  
**Ozone Depleting Chemicals:** Not Applicable **SARA 311/312:** None  
**TSCA:** All components are listed. **WHMIS (Canada):** Not regulated.  
**Canadian DSL:** All components are listed. **RCRA Hazard Class:** Nonhazardous  
**40 CFR Part 372 (SARA Section 313):** Not Applicable. **CERCLA:** Nonhazardous  
**TSCA 12B Components:** None

## XVI. OTHER INFORMATION

SDS first issued. SDS data revised.  
New Jersey Right To Know: See Section II.

Signature:   
Prepared By: D. A. Oldiges, Technical Director

Date Issued: April 28, 2000

### Disclaimer

The information contained herein is accurate and reliable as of the date issued to the best of JET-LUBE's knowledge. JET-LUBE® doesn't warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising from the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

# JET-LUBE, INC.

## MATERIAL SAFETY DATA SHEET

**Product Name:** #202 MOLY-LITH™

**Chemical Family:** Petroleum based lubricating grease.

**Use:** Equipment Lubrication.

**Manufacturer/Supplier:** JET-LUBE, INC.

**Address:** 4849 Homestead Rd., Ste. #200

Houston, TX, 77028 USA **Phone:** 713-674-7617

**Emergency Phone:** 713-674-7617 **Fax:** 713-678-4604

**Chemtrec 24 hours (USA):** 800-424-9300

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Petroleum oil	64742525/64742014	60-100	Oil mist TWA-5mg/m <sup>3</sup>	N/A	N/A
Nonhazardous Blend	7620771/9003296 1317335/68411461	10-20	UN	UN	UN

### Main Hazards—Health Effects

**Eyes:** May cause irritation. **Inhalation:** Viscous nature may block breathing passages if inhaled. **Ingestion:** May cause diarrhea.

**Skin:** For hypersensitive persons, may irritate the skin after prolonged periods of contact.

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help. **Inhalation:** Clear air passage. If respiratory difficulty continues, seek medical help. **Ingestion:** Wash out mouth immediately. Consult physician. **Skin:** Wash thoroughly with hand cleanser, followed by soap & water. Contaminated clothing should be dry cleaned before reuse.

**Extinguishing Media:** Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist. **Unsuitable Extinguishing Media:** Water jet. **Protective Equipment for Fire fighting:** Self-contained breathing apparatus.

**Personal Precautions:** Wear gloves & protective overalls. **Environmental Precautions:** Do not allow it to enter drains. **Spillage:** Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

**Handling:** No special handling precautions necessary. **Storage:** Do not store at elevated temperatures.

**Respiratory Protection:** None needed. **Hand Protection:** Protective gloves for hypersensitive persons. **Eye Protection:** Glasses, if applied to parts in motion. **Body Protection:** Overalls.

**Physical State:** Semisolid paste **Color:** Opaque Black **Odor:** Petroleum **pH:** Neutral **Boiling Range/Point °F (°C):** <600 (316)

**Melting Point °F (°C):** 390 (199) typical **Flash Point (COC) °F (°C):** 430 (221) **Autoignition Temperature °F (°C):** >500 (260)

**Explosive Properties:** LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** N/A

**Vapor Pressure (kPa):** <0.01 **Percent Volatiles:** Nil **Density (g/cm<sup>3</sup>):** 0.89 **Flammability:** Not flammable at ambient temperature.

**QAR Value:** N/A **Oxidizing Properties:** None **Water Solubility:** Slight, not readily soluble **Vapor Density:** >5

**Stability:** Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition and extreme temperatures. **Materials to Avoid:** Strong inorganic & organic acids, oxidizing agents. **Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons and oxides of carbon, sulfur, and nitrogen. Residue mainly comprised of soot & mineral oxides.

**Acute Toxicity:** Not known. **Irritation—Skin:** Very mild. **Skin Sensitization:** Not known. **Subacute/Sub-chronic Toxicity:** Not known.

**Genotoxicity:** None known. **Chronic Toxicity:** None known. **California Prop 65:** N/A **Carcinogen:** NTP: No IARC: No OSHA: No

**EC Classification (67/548/EEC):** No **LC-50:** >2000mg/l—extrapolated from component data (Mysidopsis Bahía). **LD-50:** Not applicable

**Possible Effects:** In extreme cases, may generate oil fractions that could act as a marine pollutant. Occurrences of this nature are highly unlikely. **Behavior:** Relatively well behaved. Bioaccumulation potential nil. **Environmental Fate:** Highly unlikely to cause widespread contamination. Nontoxic to marine or land organisms.

**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice. **Container Disposal:** Pails without liner—see Product Disposal section above. Pails with plastic liner—pail may only be disposed of via standard waste disposal services, recycled or reused. **Liner—see Product Disposal section above.**

Not classified as hazardous for transport. **D.O.T.:** Nonhazardous **UN No.:** Nonhazardous **Air Transport (ICAO & IATA):** Nonhazardous **Sea Transport (IMO & IMDG):** Nonhazardous **Road & Rail Transport (ADR/RID):** Nonhazardous

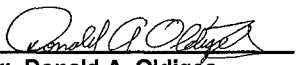
**Labeling Information:** None needed. **EC Annex 1 Classification:** Not Applicable. **R Phrases:** R22—harmful if swallowed.

**S Phrases:** None applicable, as known. **Ozone Depleting Chemicals:** Not applicable. **TSCA:** All components are listed.

**WHMIS (Canada):** Not controlled. **Canadian DSL:** All components listed. **40 CFR Part 372 (SARA Section 313):** N/A

**CERCLA:** Nonhazardous **RCRA Hazard Class:** Nonhazardous **SARA 311/312:** None **TSCA 12B Components:** None

**New Jersey Right To Know:** See Section II

Signature: 

Prepared by: Donald A. Oldiges

Date Issued: October 31, 2006

As of issue date, the information contained herein is accurate and reliable to the best of JET-LUBE'S knowledge. JET-LUBE® does not warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising out of the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

### LEGEND

I.	IDENTIFICATION OF THE SUBSTANCE/Preparation AND COMPANY
II.	COMPOSITION INFORMATION ON INGREDIENTS
III.	HAZARDS IDENTIFICATION
IV.	FIRST AID MEASURES
V.	FIRE FIGHTING MEASURES
VI.	ACCIDENTAL RELEASE MEASURES
VII.	HANDLING AND STORAGE
VIII.	EXPOSURE CONTROL/PERSONAL PROTECTION
IX.	PHYSICAL AND CHEMICAL PROPERTIES
X.	STABILITY AND REACTIVITY
XI.	TOXICOLOGICAL INFORMATION
XII.	ECOLOGICAL INFORMATION
XIII.	WASTE DISPOSAL
XIV.	TRANSPORT INFORMATION
XV.	REGULATORY INFORMATION
XVI.	OTHER INFORMATION

### HMIS SYMBOL

HEALTH	1
FLAMMABILITY	1
REACTIVITY	0
PPI	B

### NFPA SYMBOL



# JET-LUBE, INC.

## MATERIAL SAFETY DATA SHEET

**Product Name:** ALCO-EP-73 PLUS™  
**Chemical Family:** Petroleum based lubricating grease.  
**Use:** Equipment lubrication

**Manufacturer/Supplier:** JET-LUBE, INC.  
**Address:** 4849 Homestead Rd., Ste. #200  
 Houston, TX, 77028 USA **Phone:** 713-674-7617  
**Emergency Phone:** 713-674-7617 **Fax:** 713-678-4604  
**Chemtrec 24 hours (USA):** 800-424-9300

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Petroleum oil	64742525/64742014	60-100	Oil mist TWA-5mg/M <sup>3</sup>	N/A	N/A
Nonhazardous Blend	82980549/68411461 9003296	5-10	UN	UN	UN
Organic Antimony Comp.	UN	2-5 Max	UN	UN	UN

### Main Hazards—Health Effects

**Eyes:** May cause irritation. **Inhalation:** Viscous nature may block breathing passages if inhaled. **Ingestion:** May cause diarrhea.  
**Skin:** For hypersensitive persons, may irritate the skin after prolonged periods of contact.

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help. **Inhalation:** Clear air passage. If respiratory difficulty continues, seek medical help. **Ingestion:** Wash out mouth immediately. Consult physician. **Skin:** Wash thoroughly with hand cleanser, followed by soap & water. Contaminated clothing should be dry cleaned before reuse.

**Extinguishing Media:** Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist. **Unsuitable Extinguishing Media:** Water jet.  
**Protective Equipment for Fire fighting:** Self-contained breathing apparatus.

**Personal Precautions:** Wear gloves & protective overalls. **Environmental Precautions:** Do not allow it to enter drains. **Spillage:** Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

**Handling:** No special handling precautions necessary. **Storage:** Do not store at elevated temperatures.

**Respiratory Protection:** None needed. **Hand Protection:** Protective gloves for hypersensitive persons. **Eye Protection:** Glasses, if applied to parts in motion. **Body Protection:** Overalls.

**Physical State:** Adhesive Semisolid paste **Color:** Red **Odor:** Petroleum **pH:** Neutral **Boiling Range/Point °F (°C):** <600 (316)  
**Melting Point °F (°C):** 500 (260) typical **Flash Point (COC) °F (°C):** 430 (221) **Autoignition Temperature °F (°C):** >500 (260)  
**Explosive Properties:** LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** N/A  
**Vapor Pressure (kPa):** <0.01 **Percent Volatiles:** Nil **Density (g/cm<sup>3</sup>):** 0.91 **Flammability:** Not flammable at ambient temperature.  
**OSHA Value:** N/A **Oxidizing Properties:** None **Water Solubility:** Nil **Vapor Density:** >5

**Stability:** Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition & extreme temperatures. **Materials to Avoid:** Strong inorganic & organic acids, oxidizing agents. **Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons & oxides of carbon, sulfur & nitrogen. Residue mainly comprised of soot & mineral oxides.

**Acute Toxicity:** Not known. **Irritancy—Skin:** Very mild. **Skin Sensitization:** Not known. **Subacute/Sub-chronic Toxicity:** Not known.  
**Genotoxicity:** None known. **Chronic Toxicity:** None known. **California Prop 65:** N/A **Carcinogen:** NTP: No IARC: No OSHA: No  
**EC Classification (67/548/EEC):** No **LC-50:** >2000mg/l—extrapolated from component data. **LD-50:** Not applicable

**Possible Effects:** None

**Behavior:** Relatively well behaved. Bioaccumulation potential nil.

**Environmental Fate:** Highly unlikely to cause widespread contamination. Nontoxic to marine or land organisms.

**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice. **Container Disposal:** Pails without liner—see Product Disposal section above. **Pails with plastic liner—**pail may only be disposed of via standard waste disposal services, recycled or reused. **Liner—**see Product Disposal section above.

Not classified as hazardous for transport. **D.O.T.:** Nonhazardous **UN No.:** Nonhazardous **Air Transport (ICAO & IATA):** Nonhazardous  
**Sea Transport (IMO & IMDG):** Nonhazardous **Road & Rail Transport (ADR/RID):** Nonhazardous

**Labeling Information:** None needed **EC Annex 1 Classification:** Not Applicable. **R Phrases:** R22—harmful if swallowed.  
**S Phrases:** None applicable, as known. **Ozone Depleting Chemicals:** N/A **TSCA:** All components are listed. **SARA 311/312:** None  
**WHMIS (Canada):** Not controlled. **Canadian DSL:** All components listed. **40 CFR Part 372 (SARA Section 313):** This product contains an organo-antimony additive. **CERCLA:** Nonhazardous **RCRA Hazard Class:** Nonhazardous **TSCA 12B Components:** None

SDS first issued. SDS data revised. **New Jersey Right To Know:** See Section II

Signature: \_\_\_\_\_

Prepared by: Donald A. Oldiges

Date Issued: November 11, 2005

As of issue date, the information contained herein is accurate and reliable to the best of JET-LUBE'S knowledge. JET-LUBE® does not warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising out of the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

### LEGEND

- I. IDENTIFICATION OF THE SUBSTANCE/Preparation AND COMPANY
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- IV. FIRST AID MEASURES
- V. FIRE FIGHTING MEASURES
- VI. ACCIDENTAL RELEASE MEASURES
- VII. HANDLING AND STORAGE
- VIII. EXPOSURE CONTROL/PERSONAL PROTECTION
- IX. PHYSICAL AND CHEMICAL PROPERTIES
- X. STABILITY AND REACTIVITY
- XI. TOXICOLOGICAL INFORMATION
- XII. ECOLOGICAL INFORMATION
- XIII. WASTE DISPOSAL
- XIV. TRANSPORT INFORMATION
- XV. REGULATORY INFORMATION
- XVI. OTHER INFORMATION

### HMIS SYMBOL

HEALTH	1
FLAMMABILITY	1
REACTIVITY	0
PPI	B

### NFPA SYMBOL





# MATERIAL SAFETY DATA SHEET

4849 Homestead Road / P.O. Box 21258/Houston, Texas 77226 / 713-674-7617 / E-Mail sales@jetlube.com

HMIS/NFPA Health: 1 Fire: 1 Reactivity: 0

Personal Protection Index: N/A

## I. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

**Product Name:** ALUMINUM COMPLEX BASE GREASE

**Chemical Family:** Petroleum based lubricating grease.

**Use:** Equipment Lubrication

**Manufacturer/Supplier:** Jet-Lube, Inc.

**Address:** 4849 Homestead Rd., Suite 200, Houston, TX, USA, 77028

**Phone Number:** 713-674-7617 (FAX: 713-678-4604) 011-44-16286-31913 (England) (780) 463-7441 (Canada)

**Emergency Phone Number:** (713) 674-7617

**Chemtrec (24-HRS U.S.A.):** (800) 424-9300

## II. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Petroleum Oil	64742525	60-100	Oil Mist	Not Applicable	STEL: 10mg/M <sup>3</sup>
	and 64742570		TWA-5mg/M <sup>3</sup>		
Nonhazardous	82980549	5-10	UN	UN	UN

## III. HAZARDS IDENTIFICATION

### MAIN HAZARDS - Health Effects

**Eyes:** May cause irritation.

**Ingestion:** May cause diarrhea.

**Skin:** Possible rash for persons with hypersensitivity.

**Inhalation:** Viscous nature may block breathing passages if inhaled.

## IV. FIRST AID MEASURES

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help.

**Skin:** Wash thoroughly with hand cleanser, followed by soap & water. All contaminated clothing should be dry cleaned before reuse.

**Ingestion:** Consult physician.

**Inhalation:** Clear air passage and seek medical help, if respiratory difficulty continues.

## V. FIRE FIGHTING MEASURES

**Extinguishing Media:** Foam, dry powder, halon, carbon dioxide, sand, earth & water mist.

**Unsuitable Extinguishing Media:** Water jet.

**Protective Equipment for Firefighting:** Self-contained breathing apparatus.

## VI. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Wear gloves & protective overalls.

**Environmental Precautions:** Avoid disposal into drains.

**Spillage:** Scrape up bulk, then pick up residue with diatomaceous earth to avoid a walking hazard.

## VII. HANDLING AND STORAGE

**Handling:** No special handling precautions necessary.

**Storage:** Do not store at elevated temperatures.

## VIII. EXPOSURE CONTROL/PERSONAL PROTECTION

**Respiratory Protection:** None needed.

**Hand Protection:** Protective gloves for hypersensitive persons.

**Eye Protection:** Glasses, if applied to moving parts in motion

**Body Protection:** Overalls.

**IX. PHYSICAL AND CHEMICAL PROPERTIES**

**Physical State:** Semi-solid (paste)      **Color:** Amber to brown      **Odor:** Petroleum  
**Boiling Range/Point °F(°C):** <600 (316)      **Melting Point °F(°C):** >450 (232)  
**Flash Point (COC) °F (°C):** 430 (221)      **Autoignition Temperature °F(°C):** >500 (260)  
**Explosive Properties:** **LEL:** 0.9%      **UEL:** 7%      **Evaporation Rate (Butyl Acetate):** <0.01  
**Partition Coefficient (Log Pow):** Not applicable.      **Vapor Pressure (kPa):** <0.01  
**Density (g/cm<sup>3</sup>):** 0.90      **Flammability:** Not flammable at ambient temperature.  
**Oxidizing Properties:** None      **Water Solubility:** Nil      **pH:** Neutral  
**Vapor Density:** >5      **Percent Volatiles:** Nil      **OAR Group:** Not app.

**X. STABILITY AND REACTIVITY**

**Stability:** Chemically stable under normal conditions. No photoreactive agents.  
**Conditions to Avoid:** Powerful sources of ignition and extreme temperatures.  
**Materials to Avoid:** Strong inorganic & organic acids & oxidizing agents.  
**Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons and oxides of carbon, nitrogen and sulfur. Residue mainly comprised of soot & mineral oxides.

**XI. TOXICOLOGICAL INFORMATION**

**Acute Toxicity:** Not known.      **Irritancy - Skin:** Very mild.      **Allergens:** None Known  
**Skin Sensitization:** Not known.      **Sub-acute/Subchronic Toxicity:** Not known.  
**Chronic Toxicity:** None known.      **Genotoxicity:** None known.      **Carcinogens:** None  
**NTP:** No      **IARC:** No      **OSHA:** No      **EC Classification (67/548/EEC):** No  
**California Prop 65 Agents:** None known.      **LD-50:** Not Applicable  
**LC-50:** >2000 mg/kg (extrapolated from component data)

**XII. ECOLOGICAL INFORMATION**

**Possible Effects:** May generate oil fractions that could act as a marine pollutant in extreme cases, but is highly unlikely. **Behavior:** Relatively well behaved. Bioaccumulation potential nil.  
**Environmental Fate:** Highly unlikely to cause notable contamination. Nontoxic to marine or land organisms.

**XIII. WASTE DISPOSAL**

**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice.  
**Container Disposal:** Pails without liner see "Product Disposal." Pails with Plastic Liner - pail can only be disposed of via standard waste disposal services, recycled or reused. Liner - see "Product Disposal."

**XIV. TRANSPORT INFORMATION**


Not classified as hazardous for transport.      **D.O.T.:** Nonhazardous  
**UN NO.:** Not Applicable      **ROAD & RAIL TRANSPORT (ADR/RID):** Not Applicable  
**SEA TRANSPORT (IMO & IMDG):** Not Applicable      **AIR TRANSPORT (ICAO & IATA):** Not Applicable

**XV. REGULATORY INFORMATION**

**Labeling Information:** None needed.      **S Phrases:** None applicable, as known.  
**R Phrases:** R22 harmful if swallowed.      **EC Annex 1 Classification:** Not Applicable  
**Ozone Depleting Chemicals:** Not Applicable      **SARA 311/312:** None  
**TSCA:** All components are listed.      **WHMIS (Canada):** Not controlled  
**Canadian DSL:** All components are listed.      **RCRA Hazard Class:** Nonhazardous  
**40 CFR Part 372 (SARA Section 313):** Not Applicable.      **CERCLA:** Nonhazardous  
**TSCA 12B Components:** None

**XVI. OTHER INFORMATION**

SDS first issued.      SDS data revised.  
**New Jersey Right To Know:** See Section II.

Signature:   
Prepared By: D. A. Oldiges, Technical Director

Date Issued: June 7, 2006

**Disclaimer**

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# JET-LUBE, INC.

## MATERIAL SAFETY DATA SHEET

**Product Name:** ARCTIC BASE  
**Chemical Family:** Petroleum based lubricating grease  
**Use:** Equipment lubrication

**Manufacturer/Supplier:** JET-LUBE, INC.  
**Address:** 4849 Homestead Rd., Ste. #200  
 Houston, TX, 77028 USA **Phone:** 713-674-7617  
**Emergency Phone:** 713-674-7617 **Fax:** 713-678-4604  
**Chemtrec 24 hours (USA):** 800-424-9300

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Petroleum oil	64742525	60-100	Oil mist TWA-5mg/M <sup>3</sup>	N/A	STEL: 10mg/M <sup>3</sup>
Nonhazardous Blend	3159624/68411461	5-10	UN	UN	UN

### Main Hazards—Health Effects

**Eyes:** May cause irritation. **Inhalation:** Viscous nature may block breathing passages if inhaled. **Ingestion:** May cause diarrhea.  
**Skin:** For hypersensitive persons, may irritate the skin after prolonged periods of contact.

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help. **Inhalation:** Clear air passage. If respiratory difficulty continues, seek medical help. **Ingestion:** Wash out mouth immediately. Consult physician. **Skin:** Wash thoroughly with hand cleanser, followed by soap & water. Contaminated clothing should be dry cleaned before reuse.

**Extinguishing Media:** Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist. **Unsuitable Extinguishing Media:** Water jet.  
**Protective Equipment for Fire fighting:** Self-contained breathing apparatus.

**Personal Precautions:** Wear gloves & protective overalls. **Environmental Precautions:** Do not allow it to enter drains. **Spillage:** Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

**Handling:** No special handling precautions necessary. **Storage:** Do not store at elevated temperatures.

**Respiratory Protection:** None needed. **Hand Protection:** Protective gloves for hypersensitive persons. **Eye Protection:** Glasses, if applied to parts in motion. **Body Protection:** Overalls.

**Physical State:** Semisolid paste **Color:** Amber **Odor:** Petroleum **pH:** Neutral **Boiling Range/Point °F (°C):** <600 (316)  
**Melting Point °F (°C):** 280 (138) **Flash Point (COC) °F (°C):** >320 (160) **Autoignition Temperature °F (°C):** >500 (260)  
**Explosive Properties:** LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** N/A  
**Vapor Pressure (kPa):** <0.01 **Percent Volatiles:** Nil **Density (g/cm<sup>3</sup>):** .89 **Flammability:** Not flammable at ambient temperature.  
**OAR Value:** N/A **Oxidizing Properties:** None **Water Solubility:** Slight **Vapor Density:** >5

**Stability:** Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition and extreme temperatures. **Materials to Avoid:** Strong inorganic & organic acids, oxidizing agents. **Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons and oxides of carbon, sulfur and nitrogen. Residue mainly comprised of soot & mineral oxides.

**Acute Toxicity:** Not known. **Irritancy—Skin:** Very mild. **Skin Sensitization:** Not known. **Subacute/Sub-chronic Toxicity:** Not known.  
**Genotoxicity:** None known. **Chronic Toxicity:** None known. **California Prop 65:** N/A **Carcinogen:** NTP: No IARC: No OSHA: No  
**EC Classification (67/548/EEC):** No **LC-50:** >2000mg/kg—extrapolated from component data. **LD-50:** Not applicable

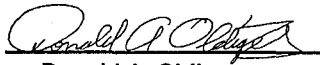
**Possible Effects:** In extreme cases, may generate oil fractions that could act as a marine pollutant. Occurrences of this nature are highly unlikely. **Behavior:** Relatively well behaved. Bioaccumulation potential nil. **Environmental Fate:** Highly unlikely to cause widespread contamination. Nontoxic to marine or land organisms.

**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice. **Container Disposal:** Pails without liner—see Product Disposal section above. Pails with plastic liner—pail may only be disposed of via standard waste disposal services, recycled or reused. Liner—see Product Disposal section above.

Not classified as hazardous for transport. **D.O.T.:** Nonhazardous **UN No.:** Nonhazardous **Air Transport (ICAO & IATA):** Nonhazardous  
**Sea Transport (IMO & IMDG):** Nonhazardous **Road & Rail Transport (ADR/RID):** Nonhazardous

**Labeling Information:** None needed **EC Annex 1 Classification:** Not Applicable. **R Phrases:** R22—harmful if swallowed.  
**S Phrases:** None applicable, as known. **Ozone Depleting Chemicals:** Not applicable. **TSCA:** All components are listed.  
**WHMIS (Canada):** Not controlled. **Canadian DSL:** All components listed. **40 CFR Part 372 (SARA Section 313):** N/A  
**CERCLA:** Nonhazardous **RCRA Hazard Class:** Nonhazardous **SARA 311/312:** None **TSCA 12B Components:** None

SDS first issued. SDS data revised. **New Jersey Right To Know:** See Section II

Signature:   
 Prepared by: Donald A. Oldiges  
 Date Issued: February 22, 2004

of issue date, the information contained herein is accurate and reliable to the best of JET-LUBE'S knowledge. JET-LUBE® does not warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising out of the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

### LEGEND

- I. IDENTIFICATION OF THE SUBSTANCE/Preparation and COMPANY
- II. COMPOSITION INFORMATION ON INGREDIENTS
- III. HAZARDS IDENTIFICATION
- IV. FIRST AID MEASURES
- V. FIRE FIGHTING MEASURES
- VI. ACCIDENTAL RELEASE MEASURES
- VII. HANDLING AND STORAGE
- VIII. EXPOSURE CONTROL/PERSONAL PROTECTION
- IX. PHYSICAL AND CHEMICAL PROPERTIES
- X. STABILITY AND REACTIVITY
- XI. TOXICOLOGICAL INFORMATION
- XII. ECOLOGICAL INFORMATION
- XIII. WASTE DISPOSAL
- XIV. TRANSPORT INFORMATION
- XV. REGULATORY INFORMATION
- XVI. OTHER INFORMATION

### HMIS SYMBOL

HEALTH	1
FLAMMABILITY	1
REACTIVITY	0
PPI	N/A

### NFPA SYMBOL



EPAHO106000696

# JET-LUBE, INC.

## MATERIAL SAFETY DATA SHEET

**Product Name:** CA BLUE HT GREASE  
**Chemical Family:** Calcium Complex Grease  
**Use:** Lubrication

**Manufacturer/Supplier:** JET-LUBE, INC.  
**Address:** 4849 Homestead Rd., Ste. #200  
Houston, TX, 77028 USA **Phone:** 713-674-7617  
**Emergency Phone:** 713-674-7617 **Fax:** 713-678-4604  
**Chemtrec 24 hours (USA):** 800-424-9300

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Petroleum Oils	64742525/64742638	70-90	Oil Mist	N/A	N/A
	64742570		TWA-5mg/M <sup>3</sup>		
Nonhazardous Blend	68307879/57855773	10-30	N/A	N/A	N/A
	9003274				

### Main Hazards-Health Effects

**Eyes:** May cause irritation. **Inhalation:** Viscous nature may block breathing passages if inhaled. **Ingestion:** May cause diarrhea.  
**Skin:** For hypersensitive persons, may irritate the skin after prolonged periods of contact.

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help. **Inhalation:** Clear air passage. If respiratory difficulty continues, seek medical help. **Ingestion:** Wash out mouth immediately. Consult physician. **Skin:** Wash thoroughly with hand cleanser, followed by soap & water. Contaminated clothing should be dry cleaned before reuse.

**Extinguishing Media:** Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist. **Unsuitable Extinguishing Media:** Water jet.  
**Protective Equipment for Fire fighting:** Self-contained breathing apparatus.

**Personal Precautions:** Wear gloves & protective overalls. **Environmental Precautions:** Do not allow it to enter drains. **Spillage:** Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

**Handling:** No special handling precautions necessary. **Storage:** Do not store at elevated temperatures.

**Respiratory Protection:** None needed.

**Hand Protection:** Protective gloves for hypersensitive persons.

**Eye Protection:** Glasses, if applied to parts in motion.

**Body Protection:** Overalls.

**Physical State:** Sticky Semisolid Gel **Color:** Blue **Odor:** Petroleum **pH:** Neutral **Boiling Range/Point °F (°C):** >525 (274)  
**Melting Point °F (°C):** 600 (315) **Flash Point (COC) °F (°C):** >430 (221) **Autoignition Temperature °F (°C):** >500 (260)  
**Explosive Properties:** LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** N/A  
**Vapor Pressure (kPa):** <0.01 **Percent Volatiles:** Nil **Density (g/cm<sup>3</sup>):** .93 **Flammability:** Not flammable at ambient temperature.  
**OAR Value:** N/A **Oxidizing Properties:** None **Water Solubility:** Nil **Vapor Density:** >5

**Stability:** Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition & extreme temps. **Materials to Avoid:** Strong inorganic & organic acids, oxidizing agents. **Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons & oxides of carbon. Residue mainly comprised of soot & mineral oxides.

**Acute Toxicity:** Not known. **Irritancy-Skin:** Very mild. **Skin Sensitization:** Not known. **Subacute/Sub-chronic Toxicity:** Not known.  
**Genotoxicity:** None known. **Chronic Toxicity:** None known. **California Prop 65:** N/A **Carcinogen:** NTP: No IARC: No OSHA: No  
**EC Classification (67/548/EEC):** No **Allergens:** None known. **LC-50:** >2000mg/kg—extrapolated from component data. **LD-50:** N/A

**Possible Effects:** None

**Behavior:** Relatively well behaved. Bioaccumulation potential nil.

**Environmental Fate:** Highly unlikely to cause notable contamination. Nontoxic to marine or land organisms.

**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice.

**Container Disposal:** Pails without liner—see Product Disposal section above. Pails with plastic liner—pail may only be disposed of via standard waste disposal services, recycled or reused. **Liner—see Product Disposal section above.**

Not classified as hazardous for transport.

**D.O.T.:** Nonhazardous **UN No.:** N/A


**Air Transport (ICAO & IATA):** N/A

**Sea Transport (IMO & IMDG):** N/A

**Road & Rail Transport (ADR/RID):** N/A

**Labeling Information:** None needed **EC Annex 1 Classification:** N/A **R Phrases:** R22 harmful if swallowed (could block passages)  
**S Phrases:** N/A, as known. **Ozone Depleting Chemicals:** N/A **TSCA:** All components are listed. **WHMIS (Canada):** Not controlled.  
**Canadian DSL:** All components listed. **40 CFR Part 372 (SARA Section 313):** N/A **CERCLA:** Nonhazardous  
**RCRA Hazard Class:** Nonhazardous **SARA 311/312:** None **TSCA 12B Components:** None

SDS first issued. SDS data revised. **New Jersey Right To Know:** See Section II

Signature:   
Prepared by: Donald A. Oldiges  
Date Issued: August 16, 2001

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### LEGEND

- I. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY
- II. COMPOSITION INFORMATION ON INGREDIENTS
- III. HAZARDS IDENTIFICATION
- IV. FIRST AID MEASURES
- V. FIRE FIGHTING MEASURES
- VI. ACCIDENTAL RELEASE MEASURES
- VII. HANDLING AND STORAGE
- VIII. EXPOSURE CONTROL/PERSONAL PROTECTION
- IX. PHYSICAL AND CHEMICAL PROPERTIES
- X. STABILITY AND REACTIVITY
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- XII. ECOLOGICAL INFORMATION
- XIII. WASTE DISPOSAL
- XIV. TRANSPORT INFORMATION
- XV. REGULATORY INFORMATION
- XVI. OTHER INFORMATION

### HMIS SYMBOL

HEALTH	1
FLAMMABILITY	1
REACTIVITY	0
PPI	NR

### NFPA SYMBOL



EPAHO106000697

# MATERIAL SAFETY DATA SHEET

HMIS/NFPA Health: 1 Fire: 1 Reactivity: 0 Personal Protection Index: N/A

## I. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

**Product Name:** CALCIUM BASE GREASE  
**Chemical Family:** Petroleum based lubricating grease.  
**Use:** Equipment Lubrication  
**Manufacturer/Supplier:** Jet-Lube, Inc.  
**Address:** 4849 Homestead Rd., Suite 200, Houston, TX, USA, 77028  
**Phone Number:** 713-674-7617 (FAX: 713-678-4604) 011-44-1224-211330 (U.K.)  
 011-44-1628-31913 (England) (403) 463-7441 (Canada)  
**Emergency Phone Number:** (713) 674-7617 **Chemtrec (24-HRS U.S.A.):** (800) 424-9300

## II. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Petroleum Oil 10mg/M <sup>3</sup>	64741-96-4	60-100	Oil Mist	Not Applicable	STEL:
and	64742-57-0		TWA-5mg/M <sup>3</sup>		
Nonhazardous	3159624	5-10	UN	UN	UN

## III. HAZARDS IDENTIFICATION

### MAIN HAZARDS - Health Effects

**Eyes:** May cause irritation. **Ingestion:** May cause diarrhea.  
**Skin:** Possible rash for persons with hypersensitivity.  
**Inhalation:** Viscous nature may block breathing passages if inhaled.

## IV. FIRST AID MEASURES

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help.  
**Skin:** Wash thoroughly with hand cleanser, followed by soap & water. All contaminated clothing should be dry cleaned before reuse.  
**Ingestion:** Consult physician.  
**Inhalation:** Clear air passage and seek medical help, if respiratory difficulty continues.

## V. FIRE FIGHTING MEASURES

**Extinguishing Media:** Foam, dry powder, halon, carbon dioxide, sand, earth & water mist.  
**Unsuitable Extinguishing Media:** Water jet.  
**Protective Equipment for Firefighting:** Self-contained breathing apparatus.

## VI. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Wear gloves & protective overalls.  
**Environmental Precautions:** Avoid disposal into drains.  
**Spillage:** Scrape up bulk, then pick up residue with diatomaceous earth to avoid a walking hazard.

## VII. HANDLING AND STORAGE

**Handling:** No special handling precautions necessary.  
**Storage:** Do not store at elevated temperatures.

## VIII. EXPOSURE CONTROL/PERSONAL PROTECTION

**Respiratory Protection:** None needed.  
**Hand Protection:** Protective gloves for hypersensitive persons.  
**Eye Protection:** Glasses, if applied to moving parts in motion  
**Body Protection:** Overalls.

**IX. PHYSICAL AND CHEMICAL PROPERTIES**

**Physical State:** Semi-solid (paste) **Color:** Amber to brown **Odor:** Petroleum  
**Boiling Range/Point °F(°C):** <600 (316) **Melting Point °F(°C):** 280 (138)  
**Flash Point (COC) °F(°C):** 430 (221) **Autoignition Temperature °F(°C):** >500 (260)  
**Explosive Properties:** LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01  
**Partition Coefficient (Log Pow):** Not applicable. **Vapor Pressure (kPa):** <0.01  
**Density (g/cm<sup>3</sup>):** 0.90 **Flammability:** Not flammable at ambient temperature.  
**Oxidizing Properties:** None **Water Solubility:** Slight, not readily soluble  
**Vapor Density:** >5 **Percent Volatiles:** Nil **pH:** Neutral **OAR Value:** Not app.

**X. STABILITY AND REACTIVITY**

**Stability:** Chemically stable under normal conditions.  
**Conditions to Avoid:** Powerful sources of ignition and extreme temperatures.  
**Materials to Avoid:** Strong inorganic & organic acids & oxidizing agents.  
**Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons and oxides of carbon, nitrogen and sulfur.  
Residue mainly comprised of soot & mineral oxides.

**XI. TOXICOLOGICAL INFORMATION**

**Acute Toxicity:** Not known. **Irritancy - Skin:** Very mild. **Allergens:** None Known  
**Skin Sensitization:** Not known. **Sub-acute/Subchronic Toxicity:** Not known.  
**Chronic Toxicity:** None known. **Genotoxicity:** None known. **Carcinogens:** None  
**NTP:** No **IARC:** No **OSHA:** No **EC Classification (67/548/EEC):** No  
**California Prop 65 Agents:** None known.  
**LC-50:** >2000 mg/kg (extrapolated from component data) **LD-50:** Not Applicable

**XII. ECOLOGICAL INFORMATION**

**Possible Effects:** May generate oil fractions that could act as a marine pollutant in extreme cases, but is highly unlikely.  
**Behavior:** Relatively well behaved. Bioaccumulation potential nil.  
**Environmental Fate:** Highly unlikely to cause notable contamination. Nontoxic to marine or land organisms.

**XIII. WASTE DISPOSAL**

**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice.  
**Container Disposal:** Pails without liner see "Product Disposal." Pails with Plastic Liner - pail can only be disposed of via standard waste disposal services, recycled or reused. Liner - see "Product Disposal."

**XIV. TRANSPORT INFORMATION**

Not classified as hazardous for transport. **D.O.T.:** Nonhazardous  
**UN NO.:** Not Applicable **ROAD & RAIL TRANSPORT (ADR/RID):** Not Applicable  
**SEA TRANSPORT (IMO & IMDG):** Not Applicable  
**AIR TRANSPORT (ICAO & IATA):** Not Applicable

**XV. REGULATORY INFORMATION**

**Labeling Information:** None needed. **S Phrases:** None applicable, as known.  
**R Phrases:** R22 harmful if swallowed. **EC Annex 1 Classification:** Not Applicable  
**Ozone Depleting Chemicals:** Not Applicable **SARA 311/312:** None  
**TSCA:** All components are listed. **WHMIS (Canada):** Not regulated.  
**Canadian DSL:** All components are listed. **RCRA Hazard Class:** Nonhazardous  
**40 CFR Part 372 (SARA Section 313):** Not Applicable. **CERCLA:** Nonhazardous  
**TSCA 12B Components:** None

**XVI. OTHER INFORMATION**

SDS first issued. SDS data revised.  
New Jersey Right To Know: See Section II.

Signature:   
Prepared By: D. A. Oldiges, Technical Director

Date Issued: January 31, 2001

**Disclaimer**

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# JET-LUBE, INC.

## MATERIAL SAFETY DATA SHEET

**Product Name:** CB-2™  
**Chemical Family:** Petroleum based lubricating grease  
**Use:** Equipment lubrication.

**Manufacturer/Supplier:** JET-LUBE, INC.  
**Address:** 4849 Homestead Rd., Ste. #200  
Houston, TX, 77028 USA **Phone:** 713-674-7617  
**Emergency Phone:** 713-674-7617 **Fax:** 713-678-4604  
**Chemtrec 24 hours (USA):** 800-424-9300

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Petroleum oil	64742525/64742014	60-100	Oil mist TWA-5mg/M <sup>3</sup>	N/A	STEL: 10mg/M <sup>3</sup>
Nonhazardous Blend	7620771/68411461	5-10	UN	UN	UN

### Main Hazards—Health Effects

**Eyes:** May cause irritation. **Inhalation:** Viscous nature may block breathing passages if inhaled. **Ingestion:** May cause diarrhea.  
**Skin:** For hypersensitive persons, may irritate the skin after prolonged periods of contact.

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help. **Inhalation:** Clear air passage. If respiratory difficulty continues, seek medical help. **Ingestion:** Wash out mouth immediately. Consult physician. **Skin:** Wash thoroughly with hand cleanser, followed by soap & water. Contaminated clothing should be dry cleaned before reuse.

**Extinguishing Media:** Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist. **Unsuitable Extinguishing Media:** Water jet.  
**Protective Equipment for Fire fighting:** Self-contained breathing apparatus.

**Personal Precautions:** Wear gloves & protective overalls. **Environmental Precautions:** Do not allow it to enter drains. **Spillage:** Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

**Handling:** No special handling precautions necessary. **Storage:** Do not store at elevated temperatures.

**Respiratory Protection:** None needed. **Hand Protection:** Protective gloves for hypersensitive persons. **Eye Protection:** Glasses, if applied to parts in motion. **Body Protection:** Overalls.

**Physical State:** Semisolid paste **Color:** Amber/Brown **Odor:** Petroleum **pH:** Neutral **Boiling Range/Point °F (°C):** <600 (316)  
**Melting Point °F (°C):** 392 (200) typical **Flash Point (COC) °F (°C):** 430 (221) **Autoignition Temperature °F (°C):** >500 (260)  
**Explosive Properties:** LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** N/A  
**Vapor Pressure (kPa):** <0.01 **Percent Volatiles:** Nil **Density (g/cm³):** 0.90 **Flammability:** Not flammable at ambient temperature.  
**OAR Value:** N/A **Oxidizing Properties:** None **Water Solubility:** Slight, not readily soluble **Vapor Density:** >5

**Stability:** Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition and extreme temperatures. **Materials to Avoid:** Strong inorganic & organic acids, oxidizing agents. **Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons and oxides of carbon, sulfur and nitrogen. Residue mainly comprised of soot & mineral oxides.

**Acute Toxicity:** Not known. **Irritation—Skin:** Very mild. **Skin Sensitization:** Not known. **Subacute/Sub-chronic Toxicity:** Not known.  
**Genotoxicity:** None known. **Chronic Toxicity:** None known. **California Prop 65:** N/A **Carcinogen:** NTP: No IARC: No **OSHA:** No  
**EC Classification (67/548/EEC):** No **Allergens:** None known. **LC-50:** >2000mg/kg—extrapolated from component data. **LD-50:** N/A

**Possible Effects:** In extreme cases, may generate oil fractions that could act as a marine pollutant. Occurrences of this nature are highly unlikely. **Behavior:** Relatively well behaved. Bioaccumulation potential nil. **Environmental Fate:** Highly unlikely to cause widespread contamination. Nontoxic to marine or land organisms.

**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice. **Container Disposal:** Pails without liner—see Product Disposal section above. **Pails with plastic liner—**pail may only be disposed of via standard waste disposal services, recycled or reused. **Liner—**see Product Disposal section above.

Not classified as hazardous for transport. **D.O.T.:** Nonhazardous **UN No.:** Nonhazardous **Air Transport (ICAO & IATA):** Nonhazardous  
**Sea Transport (IMO & IMDG):** Nonhazardous **Road & Rail Transport (ADR/RID):** Nonhazardous

**Labeling Information:** None needed **EC Annex 1 Classification:** Not Applicable. **R Phrases:** R22—harmful if swallowed.  
**S Phrases:** None applicable, as known. **Ozone Depleting Chemicals:** Not applicable. **TSCA:** All components are listed.  
**WHMIS (Canada):** Not controlled. **Canadian DSL:** All components listed. **40 CFR Part 372 (SARA Section 313):** N/A  
**CERCLA:** Nonhazardous **RCRA Hazard Class:** Nonhazardous **SARA 311/312:** None **TSCA 12B Components:** None

SDS first issued. SDS data revised. **New Jersey Right To Know:** See Section II

**Signature:** \_\_\_\_\_  
**Prepared by:** Donald A. Oldiges  
**Date Issued:** June 13, 2005

As of issue date, the information contained herein is accurate and reliable to the best of JET-LUBE'S knowledge. JET-LUBE® does not warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising out of the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

### LEGEND

- I. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY
- II. COMPOSITION INFORMATION ON INGREDIENTS
- III. HAZARDS IDENTIFICATION
- IV. FIRST AID MEASURES
- V. FIRE FIGHTING MEASURES
- VI. ACCIDENTAL RELEASE MEASURES
- VII. HANDLING AND STORAGE
- VIII. EXPOSURE CONTROL/PERSONAL PROTECTION
- IX. PHYSICAL AND CHEMICAL PROPERTIES
- X. STABILITY AND REACTIVITY
- XI. TOXICOLOGICAL INFORMATION
- XII. ECOLOGICAL INFORMATION
- XIII. WASTE DISPOSAL
- XIV. TRANSPORT INFORMATION
- XV. REGULATORY INFORMATION
- XVI. OTHER INFORMATION

### HMIS SYMBOL

HEALTH	1
FLAMMABILITY	1
REACTIVITY	0
PPI	N/A

### NFPA SYMBOL



# THE KIRKPATRICK GROUP, INC.


## MATERIAL SAFETY DATA SHEET

**Product Name: DYNAGARD BLUE****Chemical Family:** Petroleum based lubricating grease**Use:** Equipment lubrication, wire rope protector and lubricant**Manufacturer Under Contract:** JET-LUBE, INC.**Address:** 4849 Homestead Rd., Ste. #200Houston, TX, 77028 USA **Phone:** 713-674-7617**Emergency Phone:** 713-674-7617 **Fax:** 713-678-4604**Chemtrec 24 hours (USA):** 800-424-9300**Hazardous Components****CAS No.****Wt%****OSHA PEL****ACGIH TLV****Other Limits of Exposure**

This material is not considered nonhazardous by OSHA Communication Std 29 CFR 1910.1200.

The confidential list of nonhazardous ingredients may be provided upon request.

**Main Hazards-Health Effects****Eyes:** May cause irritation. **Inhalation:** Viscous nature may block breathing passages if inhaled. **Ingestion:** May cause diarrhea.**Skin:** Possible rash for persons with persensitivity.**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help. **Inhalation:** Clear air passage. If respiratory difficulty continues, seek medical help. **Ingestion:** Wash out mouth immediately. Consult physician. **Skin:** Wash thoroughly with hand cleanser, followed by soap & water. Contaminated clothing should be dry cleaned before reuse.**Extinguishing Media:** Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist. **Unsuitable Extinguishing Media:** Water jet.**Protective Equipment for Fire fighting:** Self-contained breathing apparatus.**Personal Precautions:** Wear gloves & protective overalls. **Environmental Precautions:** Do not allow it to enter drains. **Spillage:** Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.**Handling:** No special handling precautions necessary. **Storage:** Do not store at elevated temperatures.**Respiratory Protection:** None needed. **Hand Protection:** Protective gloves for hypersensitive persons. **Eye Protection:** Glasses, if applied to parts in motion. **Body Protection:** Overalls.**Physical State:** Semisolid paste **Color:** Blue **Odor:** Sweet **pH:** Neutral **Boiling Range/Point °F (°C):** >525 (274)**Melting Point °F (°C):** 392 (200) **Flash Point (COC) °F (°C):** >430 (221) **Autoignition Temperature °F (°C):** >500 (260)**Explosive Properties:** LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** N/A**Vapor Pressure (kPa):** <0.01 **Percent Volatiles:** Nil **Density (g/cm³):** 1.0 **Flammability:** Not flammable at ambient temperature.**OAR Value:** N/A **Oxidizing Properties:** None **Water Solubility:** Nil **Vapor Density:** >5**Stability:** Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition & extreme temps. **Materials to Avoid:** Strong inorganic & organic acids. **Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons & oxides of carbon, sulfur & nitrogen. Residue mainly comprised of soot & mineral oxides.**Acute Toxicity:** Not known. **Irritancy-Skin:** Very mild. **Skin Sensitization:** Not known. **Subacute/Sub-chronic Toxicity:** Not known.**Genotoxicity:** None known. **Chronic Toxicity:** None known. **California Prop 65:** N/A **Carcinogen:** NTP: No IARC: No OSHA: No**EC Class (67/548/EEC):** No **Allergens:** None known. **LC-50:** 25,000 ppm-actual **LD-50:** N/A**Possible Effects:** Highly unlikely to generate oil fractions that could act as a marine pollutant.**Behavior:** Relatively well behaved. Bioaccumulation potential nil.**Environmental Fate:** Highly unlikely to cause notable contamination.**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice.**Container Disposal:** Pails without liner—see Product Disposal section above. Pails with plastic liner—pail may only be disposed of via standard waste disposal services, recycled or reused. **Liner—see Product Disposal section above.**Not classified as hazardous for transport. **D.O.T.:** Nonhazardous **UN No.:** Nonhazardous **Air Transport (ICAO & IATA):** Nonhazardous**Sea Transport (IMO & IMDG):** Nonhazardous **Road & Rail Transport (ADR/RID):** Nonhazardous**Labeling Information:** None needed **EC Annex 1 Class:** N/A **R Phrases:** R22—harmful if swallowed. **S Phrases:** None applicable, as known. **Ozone Depleting Chemicals:** Not applicable. **TSCA:** All components are listed. **WHMIS (Canada):** Not controlled.**Canadian DSL:** All components listed. **SARA 311/312:** None above reportable limits **TSCA 12B Components:** None above reportable limits**40 CFR Part 372 (SARA Section 313):** None above reportable limits **CERCLA:** Nonhazardous **RCRA Hazard Class:** NonhazardousSDS first issued. SDS data revised. **New Jersey Right To Know:** See Section II

Signature:   
Prepared by: Donald A. Oldiges  
Date Issued: March 3, 2006

\* All formulations and blending processes  
proprietary to:

THE KIRKPATRICK GROUP, INC.  
Tel: 972-509-2468  
Fax: 972-509-2554

**LEGEND**

- I. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY
- II. COMPOSITION INFORMATION ON INGREDIENTS
- III. HAZARDS IDENTIFICATION
- IV. FIRST AID MEASURES
- V. FIRE FIGHTING MEASURES
- VI. ACCIDENTAL RELEASE MEASURES
- VII. HANDLING AND STORAGE
- VIII. EXPOSURE CONTROL/PERSONAL PROTECTION
- IX. PHYSICAL AND CHEMICAL PROPERTIES
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- XII. ECOLOGICAL INFORMATION
- XIII. WASTE DISPOSAL
- XIV. TRANSPORT INFORMATION
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- XVI. OTHER INFORMATION

**HMIS SYMBOL**

HEALTH	1
FLAMMABILITY	1
REACTIVITY	0
PPI	N/A

**NFPA SYMBOL**

EPAHO106000701



# MATERIAL SAFETY DATA SHEET

4849 Homestead Road / P.O. Box 21258/Houston, Texas 77226 / 713-674-7617 / E-Mail sales@jetlube.com

HMIS/NFPA Health: 0 Fire: 1 Reactivity: 0 Personal Protection Index: Not Applicable

## I. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

**Product Name:** FOOD GRADE BASE

**Chemical Family:** Synthetic and white mineral oil.

**Use:** Food Machinery Grease for use in Food Contact Applications

**Manufacturer/Supplier:** Jet-Lube, Inc.

**Address:** 4849 Homestead Rd., Suite 200, Houston, TX, USA, 77028

**Phone Number** 713-674-7617 (FAX: 713-678-4604) 011-44-16286-31913 (England) (780) 463-7441 (Canada)

**Emergency Phone Number:** (713) 674-7617 **Chemtrec (24-HRS U.S.A.):** (800) 424-9300

## II. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Nonhazardous Blend	82980549/8042475 9003296/68037014 68411461	100%	UN	UN	UN

## III. HAZARDS IDENTIFICATION

### MAIN HAZARDS - Health Effects

**Eyes:** May cause irritation.

**Ingestion:** May cause diarrhea.

**Skin:** May irritate the skin after prolonged periods of contact for hypersensitive persons.

**Inhalation:** Viscous nature may block breathing passages if inhaled.

## IV. FIRST AID MEASURES

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help.

**Skin:** Wash thoroughly with hand cleanser, followed by soap & water. All contaminated clothing should be dry cleaned before reuse.

**Ingestion:** Consult physician.

**Inhalation:** Clear air passage and seek medical help, if respiratory difficulty continues.

## V. FIRE FIGHTING MEASURES

**Extinguishing Media:** Foam, dry powder, halon, carbon dioxide, sand, earth & water mist.

**Unsuitable Extinguishing Media:** Water jet.

**Protective Equipment for Firefighting:** Self-contained breathing apparatus.

## VI. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Wear gloves & protective overalls.

**Environmental Precautions:** Avoid disposal into drains.

**Spillage:** Scrape up bulk, then wipe up remainder with cloth & pick up remaining residue with diatomaceous earth to avoid a walking hazard.

## VII. HANDLING AND STORAGE

**Handling:** No special handling precautions necessary.

**Storage:** Do not store at elevated temperatures.

## VIII. EXPOSURE CONTROL/PERSONAL PROTECTION

**Respiratory Protection:** None needed.

**Hand Protection:** Protective gloves for hypersensitive persons.

**Eye Protection:** Glasses, if applied to moving parts in motion

**Body Protection:** Overalls.

## IX. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Semi-solid (paste) **Color:** Translucent water, white to pale yellow  
**Odor:** Mild **Boiling Range/Point °F(°C):** <600 (316) **Melting Point °F(°C):** 500 (260)  
**Flash Point (COC) °F (°C):** 430 (221) **Autoignition Temperature °F(°C):** >500 (260)  
**Explosive Properties:** **LEL:** 0.9% **UEL:** 7% **Evaporation Rate (Butyl Acetate):** <0.01  
**Partition Coefficient (Log Pow):** Not applicable. **Vapor Pressure (kPa):** <0.01  
**Density (g/cm<sup>3</sup>):** 0.88 **Flammability:** Not flammable at ambient temperature.  
**Oxidizing Properties:** None **Water Solubility:** Nil **Vapor Density:** >5  
**Percent Volatiles:** Nil **OAR Value:** Not Applicable (No Volatiles) **pH:** Neutral

## X. STABILITY AND REACTIVITY

**Stability:** Chemically stable under normal conditions. No photoreactive agents.  
**Conditions to Avoid:** Powerful sources of ignition and extreme temperatures.  
**Materials to Avoid:** Strong inorganic & organic acids & oxidizing agents.  
**Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons and oxides of carbon.  
Residue mainly comprised of soot & oxides.

## XI. TOXICOLOGICAL INFORMATION

**Acute Toxicity:** Not known. **Irritancy - Skin:** Very mild. **Allergens:** None Known  
**Skin Sensitization:** Not known. **Sub-acute/Subchronic Toxicity:** Not known.  
**Chronic Toxicity:** None known. **Genotoxicity:** None known. **Carcinogens:** None  
**NTP:** No **IARC:** No **OSHA:** No **EC Classification (67/548/EEC):** No  
**California Prop 65 Agents:** None  
**LC-50:** >4000 mg/kg (extrapolated from component data) (mysidopsis bahia)  
**LD-50:** Not Applicable

## XII. ECOLOGICAL INFORMATION

**Possible Effects:** None  
**Behavior:** Relatively well behaved. No bioaccumulation potential.  
**Environmental Fate:** Highly unlikely to cause contamination. Nontoxic to marine or land organisms.

## XIII. WASTE DISPOSAL

**Product Disposal:** Contact waste disposal company or local authority for advice.  
**Container Disposal:** Pails without liner see "Product Disposal." Pails with Plastic Liner - pail can only be disposed of via standard waste disposal services, recycled or reused. Liner - see "Product Disposal."

## XIV. TRANSPORT INFORMATION

Not classified as hazardous for transport. **D.O.T.:** Nonhazardous  
**UN NO.:** Not Applicable **ROAD & RAIL TRANSPORT (ADR/RID):** Not Applicable  
**SEA TRANSPORT (IMO & IMDG):** Not Applicable  
**AIR TRANSPORT (ICAO & IATA):** Not Applicable

## XV. REGULATORY INFORMATION

**Labeling Information:** None needed. **S Phrases:** None applicable, as known.  
**R Phrases:** R22 harmful if swallowed (could block passages).  
**EC Annex 1 Classification:** Not Applicable **SARA 311/312:** None  
**Ozone Depleting Chemicals:** Not Applicable **CERCLA:** Nonhazardous  
**TSCA:** All components are listed. **WHMIS (Canada):** Not controlled.  
**Canadian DSL:** All components are listed. **RCRA Hazard Class:** Nonhazardous  
**Regulation 40 CFR Part 372 (SARA Section 313):** Not Applicable.  
**TSCA 12B Components:** None

## XVI. OTHER INFORMATION

SDS first issued. SDS data revised.  
**New Jersey Right To Know:** See Section II.

Signature: \_\_\_\_\_

Prepared By: D. A. Oldiges, Technical Director

Date Issued: April 8, 2003

### Disclaimer

The information contained herein is accurate and reliable as of the date issued to the best of JET-LUBE's knowledge. JET-LUBE® doesn't warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising from the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

EPAHO106000703

# JET-LUBE, INC.

## MATERIAL SAFETY DATA SHEET

**Product Name:** JET-LUBE® NO. 33  
**Chemical Family:** Synthetic based lubricant  
**Use:** Equipment lubrication

**Manufacturer/Supplier:** JET-LUBE, INC.  
**Address:** 4849 Homestead Rd., Ste. #200  
Houston, TX, 77028 USA **Phone:** 713-674-7617  
**Emergency Phone:** 713-674-7617 **Fax:** 713-678-4604  
**Chemtrec 24 hours (USA):** 800-424-9300

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Nonhazardous Blend	63148629/7631869	100	UN	UN	STEL: UN

### Main Hazards—Health Effects

**Eyes:** May cause irritation. **Inhalation:** Viscous nature may block breathing passages if inhaled. **Ingestion:** May cause diarrhea.  
**Skin:** For hypersensitive persons, may irritate the skin after prolonged periods of contact.

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help.  
**Inhalation:** Clear air passage. If respiratory difficulty continues, seek medical help. **Ingestion:** Consult physician.  
**Skin:** Wash thoroughly with hand cleanser, followed by soap & water. Contaminated clothing should be dry cleaned before reuse.

**Extinguishing Media:** Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist.  
**Unsuitable Extinguishing Media:** Water jet. **Protective Equipment for Fire fighting:** Self-contained breathing apparatus.

**Personal Precautions:** Wear gloves & protective overalls. **Environmental Precautions:** Avoid disposal into drains.  
**Spillage:** Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

**Handling:** No special handling precautions necessary. **Storage:** Do not store at elevated temperatures.

**Respiratory Protection:** None needed. **Hand Protection:** Protective gloves for hypersensitive persons.  
**Eye Protection:** Glasses, if applied to parts in motion. **Body Protection:** Overalls.

**Physical State:** Smooth, semiplastic **Color:** Light pink **Odor:** Low **pH:** Neutral **Boiling Range/Point °F (°C):** >600 (316)  
**Melting Point °F (°C):** 400 (204) **Flash Point (COC) °F (°C):** >560 (293) **Autoignition Temperature °F (°C):** >600 (316)  
**Explosive Properties:** LEL: UN UEL: UN **Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** N/A  
**Vapor Pressure (kPa):** <0.01 **Percent Volatiles:** Nil **Density (g/cm³):** 1.06 **Flammability:** Not flammable at ambient temperature.  
**OAR Value:** N/A **Oxidizing Properties:** None **Water Solubility:** Not soluble **Vapor Density:** >5

**Stability:** Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition & extreme temperatures. **Materials to Avoid:** Strong inorganic & organic acids, oxidizing agents. **Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons & oxides of carbon & silicone. Residue mainly comprised of soot & mineral oxides.

**Acute Toxicity:** Not known. **Irritancy—Skin:** Very mild. **Skin Sensitization:** Not known. **Subacute/Sub-chronic Toxicity:** Not known.  
**Genotoxicity:** None known. **Chronic Toxicity:** None known. **California Prop 65:** N/A **Carcinogen:** NTP: No IARC: No OSHA: No  
**EC Classification (67/548/EEC):** No **Allergens:** None known. **LC-50:** >4000mg/kg—extrapolated from component data. **LD-50:** N/A


**Possible Effects:** Unlikely to act as a marine pollutant.  
**Behavior:** Relatively well behaved. Bioaccumulation potential nil.  
**Environmental Fate:** Highly unlikely to cause widespread contamination. Nontoxic to marine or land organisms.

**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice.  
**Container Disposal:** Pails without liner—see Product Disposal section above. Pails with plastic liner—pail may only be disposed of via standard waste disposal services, recycled or reused. Liner—see Product Disposal section above.

Not classified as hazardous for transport **D.O.T.:** Nonhazardous **UN No.:** Nonhazardous **Air Transport (ICAO & IATA):** Nonhazardous  
**Sea Transport (IMO & IMDG):** Nonhazardous **Road & Rail Transport (ADR/RID):** Nonhazardous

**Labeling Information:** None needed **EC Annex 1 Classification:** Not Applicable. **R Phrases:** R22—harmful if swallowed.  
**S Phrases:** None applicable, as known. **Ozone Depleting Chemicals:** Not applicable. **TSCA:** All components are listed.  
**WHMIS (Canada):** Not controlled. **Canadian DSL:** All components listed. **40 CFR Part 372 (SARA Section 313):** N/A  
**CERCLA:** Nonhazardous **RCRA Hazard Class:** Nonhazardous **SARA 311/312:** None **TSCA 12B Components:** None

SDS first issued. SDS data revised. **New Jersey Right To Know:** See Section II

Signature:   
Prepared by: Donald A. Oldiges  
Date Issued: October 30, 2006

As of issue date, the information contained herein is accurate and reliable to the best of JET-LUBE'S knowledge. JET-LUBE® does not warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising out of the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

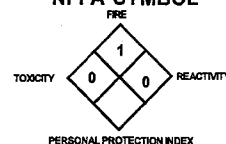
### LEGEND

- I. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY
- II. COMPOSITION INFORMATION ON INGREDIENTS
- III. HAZARDS IDENTIFICATION
- IV. FIRST AID MEASURES
- V. FIRE FIGHTING MEASURES
- VI. ACCIDENTAL RELEASE MEASURES
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- IX. PHYSICAL AND CHEMICAL PROPERTIES
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- XII. ECOLOGICAL INFORMATION
- XIII. WASTE DISPOSAL
- XIV. TRANSPORT INFORMATION
- XV. REGULATORY INFORMATION
- XVI. OTHER INFORMATION

### HMIS SYMBOL

HEALTH	0
FLAMMABILITY	1
REACTIVITY	0
PPI	

### NFPA SYMBOL



EPAHO106000704

# JET-LUBE, INC.

## MATERIAL SAFETY DATA SHEET

**Product Name:** JET-PLEX-EP™

**Chemical Family:** Lithium based lubricating grease.

**Use:** Equipment lubrication

**Manufacturer/Supplier:** JET-LUBE, INC.

**Address:** 4849 Homestead Rd., Ste. #200

Houston, TX, 77028 USA **Phone:** 713-674-7617

**Emergency Phone:** 713-674-7617 **Fax:** 713-678-4604

**Chemtrec 24 hours (USA):** 800-424-9300

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Petroleum Oil	64742525/64742014	60-80	Oil Mist TWA-5mg/M³	N/A	N/A
Nonhazardous Blend	7059167/6891936 9003274/6841146 68815496	20-30			

### Main Hazards—Health Effects

**Eyes:** May cause irritation. **Inhalation:** Viscous nature may block breathing passages if inhaled. **Ingestion:** May cause diarrhea.

**Skin:** For hypersensitive persons, may irritate the skin after prolonged periods of contact.

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help.

**Inhalation:** Clear air passage. If respiratory difficulty continues, seek medical help.

**Ingestion:** Consult physician.

**Skin:** Wash thoroughly with hand cleanser, followed by soap & water. Contaminated clothing should be dry cleaned before reuse.

**Extinguishing Media:** Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist. **Unsuitable Extinguishing Media:** Water jet.

**Protective Equipment for Fire fighting:** Self-contained breathing apparatus.

**Personal Precautions:** Wear gloves & protective overalls. **Environmental Precautions:** Avoid disposal into drains.

**Spillage:** Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

**Handling:** No special handling precautions necessary.

**Storage:** Do not store at elevated temperatures.

**Respiratory Protection:** None needed.

**Hand Protection:** Protective gloves for hypersensitive persons.

**Eye Protection:** Glasses, if applied to parts in motion.

**Body Protection:** Overalls.

**Physical State:** Semisolid paste **Color:** Red **Odor:** Petroleum **pH:** Neutral **Boiling Range/Point °F (°C):** UN

**Melting Point °F (°C):** N/A **Flash Point (COC) °F (°C):** >430 (221) **Autoignition Temperature °F (°C):** >500 (260)

**Explosive Properties:** LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** N/A

**Vapor Pressure (kPa):** <0.01 **Percent Volatiles:** Nil **Density (g/cm³):** .91 **Flammability:** Not flammable at ambient temperature.

**OAR Value:** N/A

**Oxidizing Properties:** None

**Water Solubility:** Nil

**Vapor Density:** >5

**Stability:** Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition & extreme temperatures. **Materials to Avoid:** Strong inorganic & organic acids, oxidizing agents. **Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons and oxides of carbon, sulfur and nitrogen. Residue mainly comprised of soot & mineral oxides.

**Acute Toxicity:** Not known. **Irritancy—Skin:** Very mild. **Skin Sensitization:** Not known. **Subacute/Sub-chronic Toxicity:** Not known.

**Genotoxicity:** None known. **Chronic Toxicity:** None known. **California Prop 65:** N/A **Carcinogen:** NTP: No IARC: No OSHA: No

**EC Classification (67/548/EEC):** No **Allergens:** None known. **LC-50:** >2000mg/l—extrapolated from component data. **LD-50:** N/A

**Possible Effects:** None

**Behavior:** Relatively well behaved. Bioaccumulation potential nil.

**Environmental Fate:** Highly unlikely to cause widespread contamination. Nontoxic to marine or land organisms.

**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice.

**Container Disposal:** Pails without liner—see Product Disposal section above. Pails with plastic liner—pail may only be disposed of via standard waste disposal services, recycled or reused. Liner—see Product Disposal section above.

Not classified as hazardous for transport. **D.O.T.:** Nonhazardous **UN No.:** Nonhazardous **Air Transport (ICAO & IATA):** Nonhazardous

**Sea Transport (IMO & IMDG):** Nonhazardous

**Road & Rail Transport (ADR/RID):** Nonhazardous


**Labeling Information:** None needed **EC Annex 1 Classification:** Not Applicable. **R Phrases:** R22—harmful if swallowed.

**S Phrases:** None applicable, as known. **Ozone Depleting Chemicals:** Not applicable. **TSCA:** All components are listed.

**WHMIS (Canada):** Not controlled. **Canadian DSL:** All components listed. **40 CFR Part 372 (SARA Section 313):** N/A

**CERCLA:** Nonhazardous **RCRA Hazard Class:** Nonhazardous **SARA 311/312:** None **TSCA 12B Components:** None

SDS first issued. SDS data revised. **New Jersey Right To Know:** See Section II

Signature:   
Prepared by: Donald A. Oldiges  
Date Issued: September 1, 2006

As of issue date, the information contained herein is accurate and reliable to the best of JET-LUBE'S knowledge. JET-LUBE® does not warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising out of the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

### LEGEND

- IDENTIFICATION OF THE SUBSTANCE/Preparation and COMPANY
- COMPOSITION INFORMATION ON INGREDIENTS
- HAZARDS IDENTIFICATION
- FIRST AID MEASURES
- FIRE FIGHTING MEASURES
- ACCIDENTAL RELEASE MEASURES
- HANDLING AND STORAGE
- EXPOSURE CONTROL/PERSONAL PROTECTION
- PHYSICAL AND CHEMICAL PROPERTIES
- STABILITY AND REACTIVITY
- TOXICOLOGICAL INFORMATION
- ECOLOGICAL INFORMATION
- WASTE DISPOSAL
- TRANSPORT INFORMATION
- REGULATORY INFORMATION
- OTHER INFORMATION

### HMIS SYMBOL

HEALTH	1
FLAMMABILITY	1
REACTIVITY	0
PPI	B

### NFPA SYMBOL



# JET-LUBE, INC.

## MATERIAL SAFETY DATA SHEET

**Product Name:** KILN GREASE HT™  
**Chemical Family:** Hi-temp lubricating grease.  
**Use:** Equipment lubrication.

**Manufacturer/Supplier:** JET-LUBE, INC.  
**Address:** 4849 Homestead Rd., Ste. #200  
Houston, TX, 77028 USA **Phone:** 713-674-7617  
**Emergency Phone:** 713-674-7617 **Fax:** 713-678-4604  
**Chemtrec 24 hours (USA):** 800-424-9300

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Petroleum oil	64742570/64742627	60-100	Oil mist TWA-5mg/M³	N/A	N/A
Nonhazardous Blend	82980549/1317653 57855773/9002840	10-20	UN	UN	UN

### Main Hazards—Health Effects

**Eyes:** May cause irritation. **Inhalation:** Viscous nature may block breathing passages if inhaled. **Ingestion:** May cause diarrhea.  
**Skin:** For hypersensitive persons, may irritate the skin after prolonged periods of contact.

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help. **Inhalation:** Clear air passage. If respiratory difficulty continues, seek medical help. **Ingestion:** Wash out mouth immediately. Consult physician. **Skin:** Wash thoroughly with hand cleanser, followed by soap & water. Contaminated clothing should be dry cleaned before reuse.

**Extinguishing Media:** Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist. **Unsuitable Extinguishing Media:** Water jet.  
**Protective Equipment for Fire fighting:** Self-contained breathing apparatus.

**Personal Precautions:** Wear gloves & protective overalls. **Environmental Precautions:** Do not allow it to enter drains. **Spillage:** Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

**Handling:** No special handling precautions necessary. **Storage:** Do not store at elevated temperatures.

**Respiratory Protection:** None needed. **Hand Protection:** Protective gloves for hypersensitive persons. **Eye Protection:** Glasses, if applied to parts in motion. **Body Protection:** Overalls.

**Physical State:** Lubricating Grease **Color:** Green **Odor:** Petroleum **pH:** Neutral **Boiling Range/Point °F (°C):** >700 (371)  
**Melting Point °F (°C):** 500 (260) **Flash Point (COC) °F (°C):** >560 (293) **Autoignition Temperature °F (°C):** >615 (324)  
**Explosive Properties:** LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** N/A  
**Vapor Pressure (kPa):** <0.01 **Percent Volatiles:** Nil **Density (g/cm³):** 0.94 **Flammability:** Not flammable at ambient temperature.  
**QAR Value:** N/A **Oxidizing Properties:** None **Water Solubility:** Nil **Vapor Density:** >5

**Stability:** Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition & extreme temps. **Materials to Avoid:** Strong inorganic & organic acids, oxidizing & copper reactive agents.

**Hazardous Decomposition Products:** Burning generates oxides of carbon, gaseous fluorine mixtures, smoke and fumes.

**Acute Toxicity:** Not known. **Irritancy—Skin:** Very mild. **Skin Sensitization:** Not known. **Subacute/Sub-chronic Toxicity:** Not known.  
**Genotoxicity:** None known. **Chronic Toxicity:** None known. **California Prop 65:** N/A **Carcinogen:** NTP: No IARC: No **OSHA:** No  
**EC Class (67/548/EEC):** No **Allergens:** None known. **LC-50:** >2000mg/l-extrapolated from component data (Mysidopsis Bahia). **LD-50:** N/A

**Possible Effects:** In extreme cases, may generate oil fractions that could act as a marine pollutant. Occurrences of this nature are highly unlikely. **Behavior:** Relatively well behaved. Bioaccumulation potential nil.

**Environmental Fate:** Highly unlikely to cause widespread contamination. Nontoxic to marine or land organisms.

**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice. **Container Disposal:** Pails without liner—see Product Disposal section above. **Pails with plastic liner—**pail may only be disposed of via standard waste disposal services, recycled or reused. **Liner—**see Product Disposal section above.

Not classified as hazardous for transport. **D.O.T.:** Nonhazardous **UN No.:** Nonhazardous **Air Transport (ICAO & IATA):** Nonhazardous  
**Sea Transport (IMO & IMDG):** Nonhazardous **Road & Rail Transport (ADR/RID):** Nonhazardous

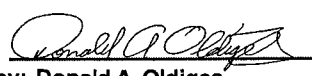
**Labeling Information:** None needed **EC Annex 1 Classification:** Not Applicable. **R Phrases:** R22—harmful if swallowed.

**S Phrases:** None applicable, as known. **Ozone Depleting Chemicals:** Not applicable. **TSCA:** All components are listed.

**WHMIS (Canada):** Not controlled. **Canadian DSL:** All components listed. **40 CFR Part 372 (SARA Section 313):** N/A

**CERCLA:** Nonhazardous **RCRA Hazard Class:** Nonhazardous **SARA 311/312:** None **TSCA 12B Components:** None

SDS first issued. SDS data revised. **New Jersey Right To Know:** See Section II

**Signature:**   
**Prepared by:** Donald A. Oldiges  
**Date Issued:** February 8, 2004

As of issue date, the information contained herein is accurate and reliable to the best of JET-LUBE'S knowledge. JET-LUBE® does not warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising out of the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

### LEGEND

- I. IDENTIFICATION OF THE SUBSTANCE/Preparation AND COMPANY
- II. COMPOSITION INFORMATION ON INGREDIENTS
- III. HAZARDS IDENTIFICATION
- IV. FIRST AID MEASURES
- V. FIRE FIGHTING MEASURES
- VI. ACCIDENTAL RELEASE MEASURES
- VII. HANDLING AND STORAGE
- VIII. EXPOSURE CONTROL/PERSONAL PROTECTION
- IX. PHYSICAL AND CHEMICAL PROPERTIES
- X. STABILITY AND REACTIVITY
- XI. TOXICOLOGICAL INFORMATION
- XII. ECOLOGICAL INFORMATION
- XIII. WASTE DISPOSAL
- XIV. TRANSPORT INFORMATION
- XV. REGULATORY INFORMATION
- XVI. OTHER INFORMATION

### HMIS SYMBOL

HEALTH	0
FLAMMABILITY	1
REACTIVITY	0
PPI	NR

### NFPA SYMBOL



# JET-LUBE, INC.

## MATERIAL SAFETY DATA SHEET

**Product Name:** KORR-GUARD™  
**Chemical Family:** Petroleum based lubricating grease.  
**Use:** Rust inhibiting compound for pipe thread storage.

**Manufacturer/Supplier:** JET-LUBE, INC.  
**Address:** 4849 Homestead Rd., Ste. #200  
Houston, TX, 77028 USA **Phone:** 713-674-7617  
**Emergency Phone:** 713-674-7617 **Fax:** 713-678-4604  
**Chemtrec 24 hours (USA):** 800-424-9300

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Petroleum Oil	64742525/64742570 26264062/3159624	40-60	Oil mist TWA-5mg/m³	N/A	STEL: 10mg/M³
Calcium Sulfonates	57855773	40-60	UN	UN	UN
Nonhazardous Blend	471341	2-5	UN	UN	UN

### Main Hazards-Health Effects

**Eyes:** May cause irritation. **Inhalation:** Viscous nature may block breathing passages if inhaled. **Ingestion:** May cause diarrhea.  
**Skin:** Possible rash for persons with hypersensitivity.

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help. **Inhalation:** Clear air passage. If respiratory difficulty continues, seek medical help. **Ingestion:** Consult physician. **Skin:** Wash thoroughly with hand cleanser, followed by soap & water. Contaminated clothing should be dry cleaned before reuse.

**Extinguishing Media:** Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist.

**Unsuitable Extinguishing Media:** Water jet. **Protective Equipment for Fire fighting:** Self-contained breathing apparatus.

**Personal Precautions:** Wear gloves & protective overalls. **Environmental Precautions:** Do not allow it to enter drains.

**Spillage:** Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

**Handling:** No special handling precautions necessary. **Storage:** Do not store at elevated temperatures.

**Respiratory Protection:** None needed.

**Hand Protection:** Protective gloves for hypersensitive persons.

**Eye Protection:** Glasses, if applied to parts in motion.

**Body Protection:** Overalls.

**Physical State:** Semisolid gel **Color:** Lt. Olive Green **Odor:** Petroleum **pH:** Neutral **Boiling Range/Point °F (°C):** <600 (316)

**Melting Point °F (°C):** 430 (221) **Flash Point (COC) °F (°C):** 430 (221) **Autoignition Temperature °F (°C):** >500 (260)

**Explosive Properties:** LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** N/A

**Vapor Pressure (kPa):** <0.01 **V.O.C. Content:** Nil **Density (g/cm³):** 0.98 **Flammability:** Not flammable at ambient temperature.

**OAR Value:** N/A **Oxidizing Properties:** None **Water Solubility:** Slight, not readily soluble **Vapor Density:** >5

**Stability:** Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition & extreme temperatures. **Materials to Avoid:** Strong inorganic & organic acids, oxidizing agents. **Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons and oxides of carbon, sulfur & nitrogen. Residue mainly comprised of soot & mineral oxides.

**Acute Toxicity:** Not known.

**Irritancy-Skin:** Very mild.

**Skin Sensitization:** Not known.

**Subacute/Sub-chronic Toxicity:** Not known.

**Genotoxicity:** None known.

**Chronic Toxicity:** None known.

**California Prop 65:** N/A **Carcinogen:** NTP: No IARC: No OSHA: No

**EC Classification (67/548/EEC):** No

**LC-50:** >2000mg/kg-extrapolated from component data. **LD-50:** Not applicable

**Allergens:** None known.

**Possible Effects:** In extreme cases, may generate oil fractions that could act as a marine pollutant. Occurrences of this nature are highly unlikely. **Behavior:** Relatively well behaved. Bioaccumulation potential nil. **Environmental Fate:** Highly unlikely to cause widespread contamination. Nontoxic to marine or land organisms.

**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice. **Container Disposal:** Pails without liner—see Product Disposal section above. Pails with plastic liner—pail may only be disposed of via standard waste disposal services, recycled or reused. **Liner—see Product Disposal section above.**

Not classified as hazardous for transport. **D.O.T.:** Nonhazardous **UN No.:** Nonhazardous **Air Transport (ICAO & IATA):** Nonhazardous  
**Sea Transport (IMO & IMDG):** Nonhazardous **Road & Rail Transport (ADR/RID):** Nonhazardous

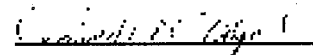
**Labeling Information:** None needed **EC Annex 1 Classification:** Not Applicable. **R Phrases:** R22—harmful if swallowed.

**S Phrases:** None applicable, as known. **Ozone Depleting Chemicals:** Not applicable. **TSCA:** All components are listed.

**WHMIS (Canada):** Not controlled. **Canadian DSL:** All components listed. **40 CFR Part 372 (SARA Section 313):** N/A

**CERCLA:** Nonhazardous **RCRA Hazard Class:** Nonhazardous **SARA 311/312:** None **TSCA 12B Components:** None

SDS first issued. SDS data revised. **New Jersey Right To Know:** See Section II

**Signature:**   
**Prepared by:** Donald A. Oldiges  
**Date Issued:** May 19, 2005

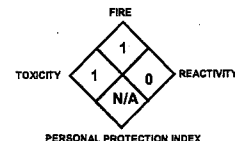
As of issue date, the information contained herein is accurate and reliable to the best of JET-LUBE'S knowledge. JET-LUBE® does not warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising out of the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

LEGEND	
I.	IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY
II.	COMPOSITION INFORMATION ON INGREDIENTS
III.	HAZARDS IDENTIFICATION
IV.	FIRST AID MEASURES
V.	FIRE FIGHTING MEASURES
VI.	ACCIDENTAL RELEASE MEASURES
VII.	HANDLING AND STORAGE
VIII.	EXPOSURE CONTROL/PERSONAL PROTECTION
IX.	PHYSICAL AND CHEMICAL PROPERTIES
X.	STABILITY AND REACTIVITY
XI.	TOXICOLOGICAL INFORMATION
XII.	ECOLOGICAL INFORMATION
XIII.	WASTE DISPOSAL
XIV.	TRANSPORT INFORMATION
XV.	REGULATORY INFORMATION
XVI.	OTHER INFORMATION

### HMIS SYMBOL

HEALTH	1
FLAMMABILITY	1
REACTIVITY	0
PPI	N/A

### NFPA SYMBOL



EPAHO106000707

# MATERIAL SAFETY DATA SHEET

HMIS/NFPA Health: 1 Fire: 1 Reactivity: 0 Personal Protection Index: N/A

## I. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

**Product Name:** LITHIUM BASE GREASE  
**Chemical Family:** Petroleum based lubricating grease.  
**Use:** Equipment Lubrication  
**Manufacturer/Supplier:** Jet-Lube, Inc.  
**Address:** 4849 Homestead Rd., Suite 200, Houston, TX, USA, 77028  
**Phone Number:** 713-674-7617 (FAX: 713-678-4604) 011-44-1224-211330 (U.K.)  
 011-44-1628-31913 (England) (403) 463-7441 (Canada)  
**Emergency Phone Number:** (713) 674-7617 Chemtrec (24-HRS U.S.A.): (800) 424-9300

## II. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Petroleum Oil	64741-96-4	60-100	Oil Mist	Not Applicable	STEL: 10mg/M <sup>3</sup>
and	64742-57-0		TWA-5mg/M <sup>3</sup>		
Nonhazardous	7620771	5-10	UN	UN	UN

## III. HAZARDS IDENTIFICATION

### MAIN HAZARDS - Health Effects

**Eyes:** May cause irritation. **Ingestion:** May cause diarrhea.  
**Skin:** Possible rash for persons with hypersensitivity.  
**Inhalation:** Viscous nature may block breathing passages if inhaled.

## IV. FIRST AID MEASURES

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help.  
**Skin:** Wash thoroughly with hand cleanser, followed by soap & water. All contaminated clothing should be dry cleaned before reuse.  
**Ingestion:** Consult physician.  
**Inhalation:** Clear air passage and seek medical help, if respiratory difficulty continues.

## V. FIRE FIGHTING MEASURES

**Extinguishing Media:** Foam, dry powder, halon, carbon dioxide, sand, earth & water mist.  
**Unsuitable Extinguishing Media:** Water jet.  
**Protective Equipment for Firefighting:** Self-contained breathing apparatus.

## VI. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Wear gloves & protective overalls.  
**Environmental Precautions:** Avoid disposal into drains.  
**Spillage:** Scrape up bulk, then pick up residue with diatomaceous earth to avoid a walking hazard.

## VII. HANDLING AND STORAGE

**Handling:** No special handling precautions necessary.  
**Storage:** Do not store at elevated temperatures.

## VIII. EXPOSURE CONTROL/PERSONAL PROTECTION

**Respiratory Protection:** None needed.  
**Hand Protection:** Protective gloves for hypersensitive persons.  
**Eye Protection:** Glasses, if applied to moving parts in motion  
**Body Protection:** Overalls.

## IX. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Semi-solid (paste) **Color:** Amber to brown **Odor:** Petroleum  
**Boiling Range/Point °F(°C):** <600 (316) **Melting Point °F(°C):** 392 (200)  
**Flash Point (COC) °F(°C):** 430 (221) **Autoignition Temperature °F(°C):** >500 (260)  
**Explosive Properties:** LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01  
**Partition Coefficient (Log Pow):** Not applicable. **Vapor Pressure (kPa):** <0.01  
**Density (g/cm³):** 0.90 **Flammability:** Not flammable at ambient temperature.  
**Oxidizing Properties:** None **Water Solubility:** Slight, not readily soluble  
**Vapor Density:** >5 **Percent Volatiles:** Nil **pH:** Neutral **OAR Group:** N/A

## X. STABILITY AND REACTIVITY

**Stability:** Chemically stable under normal conditions.  
**Conditions to Avoid:** Powerful sources of ignition and extreme temperatures.  
**Materials to Avoid:** Strong inorganic & organic acids & oxidizing agents.  
**Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons and oxides of carbon, nitrogen and sulfur.  
Residue mainly comprised of soot & mineral oxides.

## XI. TOXICOLOGICAL INFORMATION

**Acute Toxicity:** Not known. **Irritancy - Skin:** Very mild. **Allergens:** None Known  
**Skin Sensitization:** Not known. **Sub-acute/Subchronic Toxicity:** Not known.  
**Chronic Toxicity:** None known. **Genotoxicity:** None known. **Carcinogens:** None  
**NTP:** No **IARC:** No **OSHA:** No **EC Classification (67/548/EEC):** No  
**California Prop 65 Agents:** None known.  
**LC-50:** >2000 mg/kg (extrapolated from component data) **LD-50:** Not Applicable

## XII. ECOLOGICAL INFORMATION

**Possible Effects:** May generate oil fractions that could act as a marine pollutant in extreme cases, but is highly unlikely.  
**Behavior:** Relatively well behaved. Bioaccumulation potential nil.  
**Environmental Fate:** Highly unlikely to cause notable contamination. Nontoxic to marine or land organisms.

## XIII. WASTE DISPOSAL

**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice.  
**Container Disposal:** Pails without liner see "Product Disposal." Pails with Plastic Liner - pail can only be disposed of via standard waste disposal services, recycled or reused. Liner - see "Product Disposal."

## XIV. TRANSPORT INFORMATION

Not classified as hazardous for transport. **D.O.T.:** Nonhazardous  
**UN NO.:** Not Applicable **ROAD & RAIL TRANSPORT (ADR/RID):** Not Applicable  
**SEA TRANSPORT (IMO & IMDG):** Not Applicable  
**AIR TRANSPORT (ICAO & IATA):** Not Applicable

## XV. REGULATORY INFORMATION

**Labeling Information:** None needed. **S Phrases:** None applicable, as known.  
**R Phrases:** R22 harmful if swallowed. **EC Annex 1 Classification:** Not Applicable  
**Ozone Depleting Chemicals:** N/A **SARA 311/312:** None **CERCLA:** Nonhazardous  
**TSCA:** All components are listed. **WHMIS (Canada):** Not regulated.  
**Canadian DSL:** All components are listed. **RCRA Hazard Class:** Nonhazardous  
**40 CFR Part 372 (SARA Section 313):** Not Applicable.  
**TSCA 12B Components:** None

## XVI. OTHER INFORMATION

SDS first issued. SDS data revised.  
**New Jersey Right To Know:** See Section II.

Signature: \_\_\_\_\_  
Prepared By: D. A. Oldiges, Technical Director

Date Issued: August 8, 2000

### Disclaimer

The information contained herein is accurate and reliable as of the date issued to the best of JET-LUBE's knowledge. JET-LUBE® doesn't warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising from the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

# JET-LUBE, INC.

## MATERIAL SAFETY DATA SHEET

**Product Name:** MARINE Multipurpose  
**Chemical Family:** Petroleum based lubricating grease  
**Use:** Equipment lubrication

**Manufacturer/Supplier:** JET-LUBE, INC.  
**Address:** 4849 Homestead Rd., Ste. #200  
 Houston, TX, 77028 USA **Phone:** 713-674-7617  
**Emergency Phone:** 713-674-7617 **Fax:** 713-678-4604  
**Chemtrec 24 hours (USA):** 800-424-9300

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Petroleum oil	64742-52-5/64742-01-4	60-100	Oil mist TWA-5mg/M <sup>3</sup>	N/A	STEL: 10mg/M <sup>3</sup>
Nonhazardous Blend	471-34-1/7620-77-1 6841-14-6/57855-77-3	10-20	UN	UN	UN

### Main Hazards—Health Effects

**Eyes:** May cause irritation. **Inhalation:** Viscous nature may block breathing passages if inhaled. **Ingestion:** May cause diarrhea.  
**Skin:** Possible rash for persons with persensitivity.

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help. **Inhalation:** Clear air passage. If respiratory difficulty continues, seek medical help. **Ingestion:** Wash out mouth immediately. Consult physician. **Skin:** Wash thoroughly with hand cleanser, followed by soap & water. Contaminated clothing should be dry cleaned before reuse.

**Extinguishing Media:** Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist. **Unsuitable Extinguishing Media:** Water jet.  
**Protective Equipment for Fire fighting:** Self-contained breathing apparatus.

**Personal Precautions:** Wear gloves & protective overalls. **Environmental Precautions:** Do not allow it to enter drains. **Spillage:** Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

**Handling:** No special handling precautions necessary. **Storage:** Do not store at elevated temperatures.

**Respiratory Protection:** None needed. **Hand Protection:** Protective gloves for hypersensitive persons. **Eye Protection:** Glasses, if applied to parts in motion. **Body Protection:** Overalls.

**Physical State:** Semisolid paste **Color:** Purple **Odor:** Petroleum **pH:** Neutral **Boiling Range/Point °F (°C):** >525 (274)  
**Melting Point °F (°C):** 392 (200) **Flash Point (COC) °F (°C):** 430 (221) **Autoignition Temperature °F (°C):** >500 (260)  
**Explosive Properties:** LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** N/A  
**Vapor Pressure (kPa):** <0.01 **Percent Volatiles:** Nil **Density (g/cm<sup>3</sup>):** 0.96 **Flammability:** Not flammable at ambient temperature.  
**QAR Value:** N/A **Oxidizing Properties:** None **Water Solubility:** Nil **Vapor Density:** >5

**Stability:** Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition & extreme temps. **Materials to Avoid:** Strong inorganic & organic acids, oxidizing & copper reactive agents. **Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons & oxides of carbon, sulfur & nitrogen. Residue mainly comprised of soot & mineral oxides.

**Acute Toxicity:** Not known. **Irritancy—Skin:** Very mild. **Skin Sensitization:** Not known. **Subacute/Sub-chronic Toxicity:** Not known.  
**Genotoxicity:** None known. **Chronic Toxicity:** None known. **California Prop 65:** N/A **Carcinogen:** NTP: No IARC: No OSHA: No  
**EC Class (67/548/EEC):** No **Allergens:** None known. **LC-50:** >2000 mg/kg-extrapolated from component data. **LD-50:** N/A

**Possible Effects:** May generate oil fractions that could act as a marine pollutant, but is unlikely.

**Behavior:** Relatively well behaved. Bioaccumulation potential nil.

**Environmental Fate:** Highly unlikely to cause notable contamination.

**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice.

**Container Disposal:** Pails without liner—see Product Disposal section above. Pails with plastic liner—pail may only be disposed of via standard waste disposal services, recycled or reused. **Liner—see Product Disposal section above.**

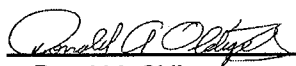
Not classified as hazardous for transport. **D.O.T.:** Nonhazardous **UN No.:** Nonhazardous **Air Transport (ICAO & IATA):** Nonhazardous  
**Sea Transport (IMO & IMDG):** Nonhazardous **Road & Rail Transport (ADR/RID):** Nonhazardous

**Labeling Information:** None needed **EC Annex 1 Classification:** Not Applicable. **R Phrases:** R22—harmful if swallowed.

**S Phrases:** None applicable, as known. **Ozone Depleting Chemicals:** Not applicable. **TSCA:** All components are listed.

**WHMIS (Canada):** Not controlled. **Canadian DSL:** All components listed. **SARA 311/312:** None **TSCA 12B Components:** None  
**40 CFR Part 372 (SARA Section 313):** N/A **CERCLA:** Nonhazardous **RCRA Hazard Class:** Nonhazardous

SDS first issued. SDS data revised. **New Jersey Right To Know:** See Section II

**Signature:**   
**Prepared by:** Donald A. Oldiges  
**Date Issued:** September 22, 2006

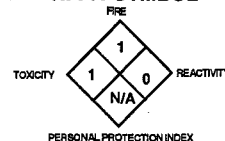
As of issue date, the information contained herein is accurate and reliable to the best of JET-LUBE'S knowledge. JET-LUBE® does not warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising out of the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

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I.	IDENTIFICATION OF THE SUBSTANCE/Preparation AND COMPANY
II.	COMPOSITION INFORMATION ON INGREDIENTS
III.	HAZARDS IDENTIFICATION
IV.	FIRST AID MEASURES
V.	FIRE FIGHTING MEASURES
VI.	ACCIDENTAL RELEASE MEASURES
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XII.	ECOLOGICAL INFORMATION
XIII.	WASTE DISPOSAL
XIV.	TRANSPORT INFORMATION
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### HMIS SYMBOL

HEALTH	1
FLAMMABILITY	1
REACTIVITY	0
PPI	N/A

### NFPA SYMBOL



# JET-LUBE, INC.

## MATERIAL SAFETY DATA SHEET

**Product Name:** MARINE WIRE ROPE & HAWSER GREASE  
**Chemical Family:** Petroleum based lubricating grease  
**Use:** Equipment lubrication

**Manufacturer/Supplier:** JET-LUBE, INC.  
**Address:** 4849 Homestead Rd., Ste. #200  
Houston, TX, 77028 USA **Phone:** 713-674-7617  
**Emergency Phone:** 713-674-7617 **Fax:** 713-678-4604  
**Chemtrec 24 hours (USA):** 800-424-9300

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Petroleum oil	64742525/64742014	60-100	Oil mist TWA-5mg/M <sup>3</sup>	N/A	STEL: 10mg/M <sup>3</sup>
Nonhazardous Blend	1314132/1317653 57855773/7620771 6841146	10-20	UN	UN	UN

### Main Hazards-Health Effects

**Eyes:** May cause irritation. **Inhalation:** Viscous nature may block breathing passages if inhaled. **Ingestion:** May cause diarrhea.  
**Skin:** Possible rash for persons with persensitivity.

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help. **Inhalation:** Clear air passage. If respiratory difficulty continues, seek medical help. **Ingestion:** Wash out mouth immediately. Consult physician. **Skin:** Wash thoroughly with hand cleanser, followed by soap & water. Contaminated clothing should be dry cleaned before reuse.

**Extinguishing Media:** Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist. **Unsuitable Extinguishing Media:** Water jet.  
**Protective Equipment for Fire fighting:** Self-contained breathing apparatus.

**Personal Precautions:** Wear gloves & protective overalls. **Environmental Precautions:** Do not allow it to enter drains. **Spillage:** Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

**Handling:** No special handling precautions necessary. **Storage:** Do not store at elevated temperatures.

**Respiratory Protection:** None needed. **Hand Protection:** Protective gloves for hypersensitive persons. **Eye Protection:** Glasses, if applied to parts in motion. **Body Protection:** Overalls.

**Physical State:** Semisolid paste **Color:** Beige **Odor:** Petroleum **pH:** Neutral **Boiling Range/Point °F (°C):** <600 (316)  
**Melting Point °F (°C):** 392 (200) **Flash Point (COC) °F (°C):** >430 (221) **Autoignition Temperature °F (°C):** >500 (260)  
**Explosive Properties:** LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** N/A  
**Vapor Pressure (kPa):** <0.01 **Percent Volatiles:** Nil **Density (g/cm<sup>3</sup>):** 0.97 **Flammability:** Not flammable at ambient temperature.  
**OAR Value:** N/A **Oxidizing Properties:** None **Water Solubility:** Slight, not readily soluble **Vapor Density:** >5

**Stability:** Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition & extreme temps. **Materials to Avoid:** Strong inorganic & organic acids, oxidizing agents. **Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons & oxides of carbon and silicon. Residue mainly comprised of soot & mineral oxides.

**Acute Toxicity:** Not known. **Irritancy-Skin:** Very mild. **Skin Sensitization:** Not known. **Subacute/Sub-chronic Toxicity:** Not known.  
**Genotoxicity:** None known. **Chronic Toxicity:** None known. **California Prop 65:** N/A **Carcinogen:** NTP: No IARC: No OSHA: No  
**EC Class (67/548/EEC):** No **Allergens:** None known. **LC-50:** >2000 mg/kg-extrapolated from component data. **LD-50:** N/A

**Possible Effects:** May generate oil fractions that could act as a marine pollutant, but is unlikely.

**Behavior:** Relatively well behaved. Bioaccumulation potential nil.

**Environmental Fate:** Highly unlikely to cause notable contamination. Nontoxic to marine or land organisms.

**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice.

**Container Disposal:** Pails without liner-see Product Disposal section above. Pails with plastic liner-pail may only be disposed of via standard waste disposal services, recycled or reused. **Liner-see** Product Disposal section above.


Not classified as hazardous for transport. **D.O.T.:** Nonhazardous **UN No.:** Nonhazardous **Air Transport (ICAO & IATA):** Nonhazardous  
**Sea Transport (IMO & IMDG):** Nonhazardous **Road & Rail Transport (ADR/RID):** Nonhazardous

**Labeling Information:** None needed **EC Annex 1 Classification:** Not Applicable. **R Phrases:** R22—harmful if swallowed.

**S Phrases:** None applicable, as known. **Ozone Depleting Chemicals:** Not applicable. **TSCA:** All components are listed.

**WHMIS (Canada):** Not controlled. **Canadian DSL:** All components listed. **SARA 311/312:** None **TSCA 12B Components:** None  
**40 CFR Part 372 (SARA Section 313):** N/A **CERCLA:** Nonhazardous **RCRA Hazard Class:** Nonhazardous

SDS first issued. SDS data revised. **New Jersey Right To Know:** See Section II

Signature:   
Prepared by: Donald A. Oldiges  
Date Issued: November 11, 2005

As of issue date, the information contained herein is accurate and reliable to the best of JET-LUBE'S knowledge. JET-LUBE® does not warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising out of the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

### LEGEND

- I. IDENTIFICATION OF THE SUBSTANCE/Preparation AND COMPANY
- II. COMPOSITION INFORMATION ON INGREDIENTS
- III. HAZARDS IDENTIFICATION
- IV. FIRST AID MEASURES
- V. FIRE FIGHTING MEASURES
- VI. ACCIDENTAL RELEASE MEASURES
- VII. HANDLING AND STORAGE
- VIII. EXPOSURE CONTROL/PERSONAL PROTECTION
- IX. PHYSICAL AND CHEMICAL PROPERTIES
- X. STABILITY AND REACTIVITY
- XI. TOXICOLOGICAL INFORMATION
- XII. ECOLOGICAL INFORMATION
- XIII. WASTE DISPOSAL
- XIV. TRANSPORT INFORMATION
- XV. REGULATORY INFORMATION
- XVI. OTHER INFORMATION

### HMIS SYMBOL

HEALTH	1
FLAMMABILITY	1
REACTIVITY	0
PPI	N/A

### NFPA SYMBOL



EPAHO106000711



# MATERIAL SAFETY DATA SHEET

4849 Homestead Rd., Houston, TX 77028, Tel: 713-674-7617, Email: sales@jetlube.com

HMIS/NFPA Health: 1 Fire: 1 Reactivity: 0 Personal Protection Index: Not Applicable

## I. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

**Product Name:** MOLY EP 620

**Chemical Family:** Semi-synthetic grease.

**Use:** Equipment Lubrication.

**Manufacturer/Supplier:** Jet-Lube, Inc.

**Address:** 4849 Homestead Rd., Suite 200, Houston, TX, USA, 77028

**Phone Number:** 713-674-7617 (FAX: 713-678-4604) 011-44-1628-31913 (England) 780-463-7441 (Canada)

**Emergency Phone Number:** (713) 674-7617 **Chemtrec (24-HRS U.S.A.):** (800) 424-9300

## II. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Petroleum Oils	64742525/64742570	50-70	Oil Mist TWA-5mg/M <sup>3</sup>	NA	STEL: 10mg/M <sup>3</sup>
Nonhazardous Blend	82980549/1317335 68037014/7782425 68511505/9003274	20-30	UN	UN	UN

## III. HAZARDS IDENTIFICATION

### MAIN HAZARDS - Health Effects

**Eyes:** May cause irritation. **Ingestion:** May cause diarrhea. **Skin:** May irritate the skin after prolonged periods of contact for hypersensitive persons. **Inhalation:** Viscous nature may block breathing passages if inhaled.

## IV. FIRST AID MEASURES

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help.

**Skin:** Wash thoroughly with hand cleanser, followed by soap & water. All contaminated clothing should be dry cleaned before reuse. **Ingestion:** Consult physician. **Inhalation:** Clear air passage and seek medical help, if respiratory difficulty continues.

## V. FIRE FIGHTING MEASURES

**Extinguishing Media:** Foam, dry powder, halon, carbon dioxide, sand, earth & water mist.

**Unsuitable Extinguishing Media:** Water jet.

**Protective Equipment for Firefighting:** Self-contained breathing apparatus.

## VI. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Wear gloves & protective overalls.

**Environmental Precautions:** Avoid disposal into drains.

**Spillage:** Scrape up bulk, then wipe up remainder with cloth & pick up remaining residue with diatomaceous earth to avoid a walking hazard.

## VII. HANDLING AND STORAGE

**Handling:** No special handling precautions necessary.

**Storage:** Do not store at elevated temperatures.

## VIII. EXPOSURE CONTROL/PERSONAL PROTECTION

**Respiratory Protection:** None needed.

**Hand Protection:** Protective gloves for hypersensitive persons.

**Eye Protection:** Glasses, if applied to moving parts in motion.

**Body Protection:** Overalls.

## IX. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Semi fluid soft gel **Color:** Black **Odor:** Petroleum/Sulfur **pH:** Neutral **Boiling Range/Point °F(°C):** <600 (316)  
**Melting Point °F (°C):** >450 (232) **Flash Point (COC) °F (°C):** 450 (232) **Autoignition Temperature °F(°C):** >500 (260)  
**Explosive Properties:** **LEL:** 0.9% **UEL:** 7% **Evaporation Rate (Butyl Acetate):** <0.01  
**Partition Coefficient (Log Pow):** NA **Vapor Pressure (kPa):** <0.01 **Density (g/cm<sup>3</sup>):** 0.93  
**Oxidizing Properties:** None **Flammability:** Not flammable at ambient temps. **Viscosity (Base Oil 40°C):** 150 Typ  
**Water Solubility:** Nil **Vapor Density:** >5 **Percent Volatiles:** Nil **OAR Group:** NA

## X. STABILITY AND REACTIVITY

**Stability:** Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition and extreme temperatures. **Materials to Avoid:** Strong inorganic & organic acids & oxidizing agents.  
**Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons and oxides of carbon. Residue mainly comprised of soot & mineral oxides.

## XI. TOXICOLOGICAL INFORMATION

**Acute Toxicity:** Not known. **Irritancy - Skin:** Very mild. **Allergens:** None known **Skin Sensitization:** Not known.  
**Sub-acute/Subchronic Toxicity:** Not known. **Chronic Toxicity:** None known. **Genotoxicity:** None known.  
**Carcinogens:** None **NTP:** No **IARC:** No **OSHA:** No **EC Classification (67/548/EEC):** No  
**California Prop 65 Agents:** None **LC-50:** >2000 mg/kg (extrapolated from component data) (mysidopsis bahia)  
**LD-50:** Not Applicable

## XII. ECOLOGICAL INFORMATION

**Possible Effects:** None **Behavior:** Relatively well behaved. No Bioaccumulation potential.  
**Environmental Fate:** Highly unlikely to cause contamination. Nontoxic to marine or land organisms.

## XIII. WASTE DISPOSAL

**Product Disposal:** Contact waste disposal company or local authority for advice. **Container Disposal:** Pails without liner see "Product Disposal." Pails with Plastic Liner - pail can only be disposed of via standard waste disposal services, recycled or reused. Liner - see "Product Disposal."

## XIV. TRANSPORT INFORMATION

Not classified as hazardous for transport. **D.O.T.:** Nonhazardous **UN NO.:** Nonhazardous  
**ROAD & RAIL TRANSPORT (ADR/RID):** Nonhazardous  
**SEA TRANSPORT (IMO & IMDG):** Nonhazardous **AIR TRANSPORT (ICAO & IATA):** Nonhazardous

## XV. REGULATORY INFORMATION

**Labeling Information:** None needed. **S Phrases:** None applicable, as known **R Phrases:** R22 harmful if swallowed (could block passages). **EC Annex 1 Class:** N/A **SARA 311/312:** None **Ozone Depleting Chemicals:** N/A  
**CERCLA:** Nonhazardous **TSCA:** All components are listed. **WHMIS (Canada):** Not controlled  
**Canadian DSL:** All components listed. **RCRA Hazard Class:** Nonhazardous  
**40 CFR Part 372 (SARA Section 313):** None **TSCA 12B Components:** None

## XVI. OTHER INFORMATION

SDS first issued. SDS data revised.  
**New Jersey Right To Know:** See Section II.

Signature:   
Prepared By: D. A. Oldiges, Technical Director

Date Issued: August 5, 2004

### Disclaimer

The information contained herein is accurate and reliable as of the date issued to the best of JET-LUBE's knowledge. JET-LUBE® doesn't warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising from the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

# JET-LUBE, INC.

## MATERIAL SAFETY DATA SHEET

**Product Name:** JET-LUBE® NCS-30  
**Chemical Family:** Complex grease base  
**Use:** Thread lubricant and sealant, anti-seize compound

**Manufacturer/Supplier:** JET-LUBE, INC.  
**Address:** 4849 Homestead Rd., Ste. #200  
Houston, TX, 77028 USA **Phone:** 713-674-7617  
**Emergency Phone:** 713-674-7617 **Fax:** 713-678-4604  
**Chemtrec 24 hours (USA):** 800-424-9300

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Lubricating Grease	74869219	45-50	N/A	N/A	N/A
Nonhazardous Blend	14807966/13463677 7789755	40-60			

### Main Hazards—Health Effects

**Eyes:** May cause irritation. **Inhalation:** Viscous nature may block breathing passages if inhaled. **Ingestion:** May cause diarrhea.  
**Skin:** For hypersensitive persons, may irritate the skin after prolonged periods of contact.

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help. **Inhalation:** Clear air passage. If respiratory difficulty continues, seek medical help. **Ingestion:** Wash out mouth immediately. Consult physician. **Skin:** Wash thoroughly with hand cleanser, followed by soap & water. Contaminated clothing should be dry cleaned before reuse.

**Extinguishing Media:** Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist. **Unsuitable Extinguishing Media:** Water jet.  
**Protective Equipment for Fire fighting:** Self-contained breathing apparatus.

**Personal Precautions:** Wear gloves & protective overalls. **Environmental Precautions:** Do not allow it to enter drains. **Spillage:** Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

**Handling:** No special handling precautions necessary. **Storage:** Do not store at elevated temperatures.

**Respiratory Protection:** None needed.

**Hand Protection:** Protective gloves for hypersensitive persons.

**Eye Protection:** Glasses, if applied to parts in motion.

**Body Protection:** Overalls.

**Physical State:** Semisolid paste **Color:** Beige **Odor:** Petroleum **pH:** Neutral **Boiling Range/Point °F (°C):** UN  
**Melting Point °F (°C):** >400 (204) **Flash Point (COC) °F (°C):** >430 (221) **Autoignition Temperature °F (°C):** >500 (260)  
**Explosive Properties:** LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** N/A  
**Vapor Pressure (kPa):** <0.01 **V.O.C. Content:** Nil **Density (g/cm³):** 1.26 **Flammability:** Not flammable at ambient temperature.  
**OAR Value:** N/A **Oxidizing Properties:** None **Water Solubility:** Nil **Vapor Density:** >5

**Stability:** Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition & extreme temps. **Materials to Avoid:** Strong inorganic & organic acids, oxidizing & copper reactive agents. **Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons & oxides of carbon, sulfur & nitrogen. Residue mainly comprised of soot & mineral oxides.

**Acute Toxicity:** Not known. **Irritancy—Skin:** Very mild. **Skin Sensitization:** Not known. **Subacute/Sub-chronic Toxicity:** Not known.

**Genotoxicity:** None known. **Chronic Toxicity:** None known. **California Prop 65:** N/A **Carcinogen:** NTP: No IARC: No OSHA: No  
**EC Classification (67/548/EEC):** No **Allergens:** None known. **LC-50:** >4000mg/l - extrapolated from component data. **LD-50:** N/A

**Possible Effects:** None

**Behavior:** Relatively well behaved. Bioaccumulation potential nil.

**Environmental Fate:** Highly unlikely to cause widespread contamination. Nontoxic to marine or land organisms.

**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice.

**Container Disposal:** Pails without liner—see Product Disposal section above. Pails with plastic liner—pail may only be disposed of via standard waste disposal services, recycled or reused. **Liner—see Product Disposal section above.**

Not classified as hazardous for transport. **D.O.T.:** Nonhazardous **UN No.:** Nonhazardous **Air Transport (ICAO & IATA):** Nonhazardous  
**Sea Transport (IMO & IMDG):** Nonhazardous **Road & Rail Transport (ADR/RID):** Nonhazardous


**Labeling Information:** None needed **EC Annex 1 Classification:** Not Applicable. **R Phrases:** R22—harmful if swallowed.

**S Phrases:** N/A, as known. **Ozone Depleting Chemicals:** N/A **TSCA:** All components are listed. **TSCA 12B Components:** None

**WHMIS (Canada):** Not controlled. **Canadian DSL:** All components listed. **40 CFR Part 372 (SARA Section 313):** N/A

**SARA 311/312:** None **CERCLA:** Nonhazardous **RCRA Hazard Class:** Nonhazardous

SDS first issued. SDS data revised. **New Jersey Right To Know:** See Section II

Signature:   
Prepared by: Donald A. Oldiges  
Date Issued: July 23, 2007

As of issue date, the information contained herein is accurate and reliable to the best of JET-LUBE'S knowledge. JET-LUBE® does not warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising out of the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

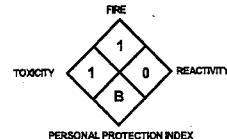
### LEGEND

- I. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY
- II. COMPOSITION INFORMATION ON INGREDIENTS
- III. HAZARDS IDENTIFICATION
- IV. FIRST AID MEASURES
- V. FIRE FIGHTING MEASURES
- VI. ACCIDENTAL RELEASE MEASURES
- VII. HANDLING AND STORAGE
- VIII. EXPOSURE CONTROL/PERSONAL PROTECTION
- IX. PHYSICAL AND CHEMICAL PROPERTIES
- X. STABILITY AND REACTIVITY
- XI. TOXICOLOGICAL INFORMATION
- XII. ECOLOGICAL INFORMATION
- XIII. WASTE DISPOSAL
- XIV. TRANSPORT INFORMATION
- XV. REGULATORY INFORMATION
- XVI. OTHER INFORMATION

### HMIS SYMBOL

HEALTH	1
FLAMMABILITY	1
REACTIVITY	0
PPI	B

### NFPA SYMBOL





# MATERIAL SAFETY DATA SHEET

4849 HOMESTEAD ROAD / P.O. BOX 21258 / HOUSTON, TEXAS 77226 / 713/674-7617 / TELEX 775393

HMIS/NFPA Health: 1 Fire: 1 Reactivity: 0 Personal Protection Index: Not Applicable

## I. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

**Product Name:** XG-431  
**Chemical Family:** Calcium Complex Grease.  
**Use:** Lubrication.  
**Manufacturer/Supplier:** Jet-Lube, Inc.  
**Address:** 4849 Homestead Rd., Suite 200, Houston, TX, USA, 77028  
**Phone Number:** 713-674-7617 (FAX: 713-678-4604) 011-44-1224-211330 (U.K.)  
011-44-1628-31913 (England) (403) 463-7441 (Canada)  
**Emergency Phone Number:** (713) 674-7617 **Chemtrec (24-HRS U.S.A.):** (800) 424-9300

## II. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Petroleum Oils	64741964/64742638	70-90	Oil Mist TWA-5mg/M <sup>3</sup>	NA	NA
Molybdenum Disulfide	1317335	10-30	UN	UN	UN

## III. HAZARDS IDENTIFICATION

### MAIN HAZARDS - Health Effects

**Eyes:** May cause irritation. **Ingestion:** May cause diarrhea.  
**Skin:** May irritate the skin after prolonged periods of contact for hypersensitive persons.  
**Inhalation:** Viscous nature may block breathing passages if inhaled.

## IV. FIRST AID MEASURES

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help.  
**Skin:** Wash thoroughly with hand cleanser, followed by soap & water. All contaminated clothing should be dry cleaned before reuse.  
**Ingestion:** Consult physician.  
**Inhalation:** Clear air passage and seek medical help, if respiratory difficulty continues.

## V. FIRE FIGHTING MEASURES

**Extinguishing Media:** Foam, dry powder, water spray (fog), carbon dioxide, or vaporizing liquid-type extinguishing agents.  
**Protective Equipment for Firefighting:** Self-contained breathing apparatus.

## VI. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Wear gloves & protective overalls.  
**Environmental Precautions:** Avoid disposal into drains.  
**Spillage:** Scrape up bulk, then wipe up remainder with cloth & pick up remaining residue with diatomaceous earth to avoid a walking hazard.

## VII. HANDLING AND STORAGE

**Handling:** No special handling precautions necessary.  
**Storage:** Do not store at elevated temperatures.

## VIII. EXPOSURE CONTROL/PERSONAL PROTECTION

**Respiratory Protection:** None needed.  
**Hand Protection:** Protective gloves for hypersensitive persons.  
**Eye Protection:** Glasses, if applied to moving parts in motion.  
**Body Protection:** Overalls.

# IX. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Semi-Solid (Paste) **Color:** Blue/black grease **Odor:** Petroleum  
**pH:** Neutral **Boiling Range/Point °F (°C):** >525 (274)  
**Melting Point °F (°C):** 600 (315) **Flash Point (COC) °F (°C):** >430 (221)  
**Autoignition Temperature °F (°C):** >500 (260) **Explosive Properties:** LEL: 0.9% UEL: 7%  
**Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** NA  
**Vapor Pressure (kPa):** <0.01 **Density (g/cm³):** 1.13 **Oxidizing Properties:** None  
**Flammability:** Not flammable at ambient temperature.  
**Water Solubility:** Nil **Vapor Density:** >5 **Percent Volatiles:** Nil **OAR Group:** NA

# X. STABILITY AND REACTIVITY

**Stability:** Chemically stable under normal conditions. No photoreactive agents.  
**Conditions to Avoid:** Powerful sources of ignition and extreme temperatures.  
**Materials to Avoid:** Strong inorganic & organic acids & oxidizing agents.  
**Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons and oxides of carbon. Residue mainly comprised of soot & mineral oxides.

# XI. TOXICOLOGICAL INFORMATION

**Acute Toxicity:** Not known. **Irritancy - Skin:** Very mild. **Allergens:** None known  
**Skin Sensitization:** Not known. **Sub-acute/Subchronic Toxicity:** Not known.  
**Chronic Toxicity:** None known. **Genotoxicity:** None known. **Carcinogens:** None  
**NTP:** No **IARC:** No **OSHA:** No **EC Classification (67/548/EEC):** No  
**California Prop 65 Agents:** None  
**LC-50:** >2000 mg/kg (extrapolated from component data) (mysidopsis bahia)  
**LD-50:** Not Applicable

# XII. ECOLOGICAL INFORMATION

**Possible Effects:** None  
**Behavior:** Relatively well behaved. No Bioaccumulation potential.  
**Environmental Fate:** Highly unlikely to cause contamination. Nontoxic to marine or land organisms.

# XIII. WASTE DISPOSAL

**Product Disposal:** Contact waste disposal company or local authority for advice.  
**Container Disposal:** Pails without liner see "Product Disposal." Pails with Plastic Liner - pail can only be disposed of via standard waste disposal services, recycled or reused. Liner - see "Product Disposal."

# XIV. TRANSPORT INFORMATION

Not classified as hazardous for transport. **D.O.T.:** Nonhazardous  
**UN NO.:** Not Applicable **ROAD & RAIL TRANSPORT (ADR/RID):** Not Applicable  
**SEA TRANSPORT (IMO & IMDG):** Not Applicable  
**AIR TRANSPORT (ICAO & IATA):** Not Applicable

# XV. REGULATORY INFORMATION

**Labeling Information:** None needed. **S Phrases:** None applicable, as known  
**R Phrases:** R22 harmful if swallowed (could block passages).  
**EC Annex 1 Classification:** Not Applicable **SARA 311/312:** None  
**Ozone Depleting Chemicals:** Not Applicable **CERCLA:** Nonhazardous  
**TSCA:** All components are listed. **WHMIS (Canada):** Not regulated.  
**Canadian DSL:** All components listed. **RCRA Hazard Class:** Nonhazardous  
**40 CFR Part 372 (SARA Section 313):** This product contains, in part, raw material components subject to reporting.  
**TSCA 12B Components:** None

# XVI. OTHER INFORMATION

SDS first issued. SDS data revised.  
**New Jersey Right To Know:** See Section II.

Signature:   
 Prepared By: D. A. Oldiges, Technical Director

Date Issued: November 30, 2000

# Disclaimer

The information contained herein is accurate and reliable as of the date issued to the best of JET-LUBE's knowledge. JET-LUBE® doesn't warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising from the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

EPAHO106000716

# JET-LUBE, INC.

## MATERIAL SAFETY DATA SHEET

**Product Name:** JET-LUBE C580 ECF BIO SULFONATE  
**Chemical Family:** Petroleum & vegetable oil based lubricating grease  
**Use:** Lubricant and preservative

**Manufacturer/Supplier:** JET-LUBE, INC.  
**Address:** 4849 Homestead Rd., Ste. #200  
Houston, TX, 77028 USA **Phone:** 713-674-7617  
**Emergency Phone:** 713-674-7617 **Fax:** 713-678-4604  
**Chemtrec 24 hours (USA):** 800-424-9300

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Petroleum Oil	64742-52-5/8042-47-5	10-20	Oil Mist TWA-5mg/M <sup>3</sup>	N/A	STEL: 10mg/M <sup>3</sup>
Nonhazardous Blend	26264-06-2/72623-81-1 68411-46-1/3159-62-4 471-34-1/68956-68-3 68037-01-4/13701-64-9	80-100	UN	UN	UN

### Main Hazards—Health Effects

**Eyes:** May cause irritation. **Inhalation:** Viscous nature may block breathing passages if inhaled.  
**Ingestion:** May cause diarrhea. **Skin:** Possible rash for persons with hypersensitivity.

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help. **Inhalation:** Clear air passage. If respiratory difficulty continues, seek medical help. **Ingestion:** Wash out mouth immediately. Consult physician. **Skin:** Wash thoroughly with hand cleanser, followed by soap & water. Contaminated clothing should be dry cleaned before reuse.

**Extinguishing Media:** Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist. **Unsuitable Extinguishing Media:** Water jet.  
**Protective Equipment for Fire fighting:** Self-contained breathing apparatus.

**Personal Precautions:** Wear gloves & protective overalls. **Environmental Precautions:** Nonhazardous **Spillage:** Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

**Handling:** Do not allow it to enter drains (it may clog drain) **Storage:** Do not store at elevated temperatures.

**Respiratory Protection:** None needed. **Hand Protection:** Protective gloves for hypersensitive persons. **Eye Protection:** Glasses, if applied to parts in motion. **Body Protection:** Overalls.

**Physical State:** Semisolid paste **Color:** Beige **Odor:** Neutral **pH:** Neutral **Boiling Range/Point °F (°C):** <600 (316)  
**Melting Point °F (°C):** None **Flash Point (COC) °F (°C):** 500 (260) **Autoignition Temperature °F (°C):** >500 (260)  
**Explosive Properties:** LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** N/A  
**Vapor Pressure (kPa):** <0.01 **% Volatiles:** Nil **Density (g/cm<sup>3</sup>):** 0.97 **Flammability:** Not flammable at ambient temperature.  
**OAR Value:** N/A **Oxidizing Properties:** None **Water Solubility:** Not readily soluble **Vapor Density:** >5

**Stability:** Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition & extreme temps. **Materials to Avoid:** Strong inorganic & organic acids, oxidizing agents. **Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons & oxides of carbon and nitrogen. Residue mainly comprised of mineral oxides.

**Acute Toxicity:** Not known **Irritancy—Skin:** None known **Skin Sensitization:** Not known **Subacute/Sub-chronic Toxicity:** Not known  
**Genotoxicity:** None known **Chronic Toxicity:** None known **California Prop 65:** N/A **Carcinogen:** NTP: No IARC: No OSHA: No  
**EC Classification (67/548/EEC):** No **Allergens:** None known **LC-50:** >4000mg/kg—extrapolated from component data. **LD-50:** N/A

**Possible Effects:** Tested and shown nonhazardous in a marine environment.

**Behavior:** Relatively well behaved. Bioaccumulation nil.


**Environmental Fate:** Will not cause notable contamination. Nontoxic to marine or land organisms.

**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice. **Container Disposal:** Pails without liner—see Product Disposal section above. **Pails with plastic liner—**pail may only be disposed of via standard waste disposal services, recycled or reused. **Liner—**see Product Disposal section above.

Not classified as hazardous for transport. **D.O.T.:** Nonhazardous **UN No.:** Nonhazardous **Air Transport (ICAO & IATA):** Nonhazardous  
**Sea Transport (IMO & IMDG):** Nonhazardous **Road & Rail Transport (ADR/RID):** Nonhazardous

**Labeling Information:** None needed **EC Annex 1 Classification:** Not Applicable. **R Phrases:** Not applicable as known.  
**S Phrases:** None applicable, as known. **Ozone Depleting Chemicals:** Not applicable. **TSCA:** All components are listed.  
**WHMIS (Canada):** Not controlled **Canadian DSL:** All components listed. **40 CFR Part 372 (SARA Section 313):** N/A  
**WERCLA:** Nonhazardous **RCRA Hazard Class:** Nonhazardous **SARA 311/312:** None **TSCA 12B Components:** None

SDS first issued. SDS data revised. **New Jersey Right To Know:** See Section II

Signature:   
Prepared by: Donald A. Oldiges  
Date Issued: January 25, 2006

As of issue date, the information contained herein is accurate and reliable to the best of JET-LUBE'S knowledge. JET-LUBE® does not warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising out of the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

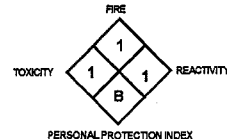
### LEGEND

- I. IDENTIFICATION OF THE SUBSTANCE/Preparation AND COMPANY
- II. COMPOSITION INFORMATION ON INGREDIENTS
- III. HAZARDS IDENTIFICATION
- IV. FIRST AID MEASURES
- V. FIRE FIGHTING MEASURES
- VI. ACCIDENTAL RELEASE MEASURES
- VII. HANDLING AND STORAGE
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### HMIS SYMBOL

HEALTH	1
FLAMMABILITY	1
REACTIVITY	1
PPI	B

### NFPA SYMBOL



# JET-LUBE, INC.

## MATERIAL SAFETY DATA SHEET

**Product Name:** CZ-EX® PLUS  
**Chemical Family:** Complex grease base  
**Use:** Thread lubricant and sealant, anti-seize compound

**Manufacturer/Supplier:** JET-LUBE, INC.  
**Address:** 4849 Homestead Rd., Ste. #200  
 Houston, TX, 77028 USA **Phone:** 713-674-7617  
**Emergency Phone:** 713-674-7617 **Fax:** 713-678-4604  
**Chemtrec 24 hours (USA):** 800-424-9300

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Petroleum Oil	64742525/64742014	25-35	Oil Mist TWA-5mg/M³	N/A	N/A
Nonhazardous Blend	26264062/62544 471341/13701649 3159624	65-75			

### Main Hazards—Health Effects

**Eyes:** May cause irritation. **Inhalation:** Viscous nature may block breathing passages if inhaled. **Ingestion:** May cause diarrhea.  
**Skin:** For hypersensitive persons, may irritate the skin after prolonged periods of contact.

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help. **Inhalation:** Clear air passage. If respiratory difficulty continues, seek medical help. **Ingestion:** Wash out mouth immediately. Consult physician. **Skin:** Wash thoroughly with hand cleanser, followed by soap & water. Contaminated clothing should be dry cleaned before reuse.

**Extinguishing Media:** Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist. **Unsuitable Extinguishing Media:** Water jet.  
**Protective Equipment for Fire fighting:** Self-contained breathing apparatus.

**Personal Precautions:** Wear gloves & protective overalls. **Environmental Precautions:** Do not allow it to enter drains. **Spillage:** Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

**Handling:** No special handling precautions necessary. **Storage:** Do not store at elevated temperatures.

**Respiratory Protection:** None needed.

**Hand Protection:** Protective gloves for hypersensitive persons.

**Eye Protection:** Glasses, if applied to parts in motion.

**Body Protection:** Overalls.

**Physical State:** Semi-solid paste **Color:** Beige **Odor:** Petroleum **pH:** Neutral **Boiling Range/Point °F (°C):** UN  
**Melting Point °F (°C):** >400 (204) **Flash Point (COC) °F (°C):** >430 (221) **Autoignition Temperature °F (°C):** >500 (260)  
**Explosive Properties:** LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** N/A  
**Vapor Pressure (kPa):** <0.01 **Percent Volatiles:** Nil **Density (g/cm³):** 1.417 **Flammability:** Not flammable at ambient temperature.  
**OAR Value:** N/A **Oxidizing Properties:** None **Water Solubility:** Nil **Vapor Density:** >5

**Stability:** Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition & extreme temps. **Materials to Avoid:** Strong inorganic & organic acids, oxidizing agents. **Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons & oxides of carbon, sulfur & nitrogen. Residue mainly comprised of soot & mineral oxides.

**Acute Toxicity:** Not known. **Irritancy—Skin:** Very mild. **Skin Sensitization:** Not known. **Subacute/Sub-chronic Toxicity:** Not known.  
**Genotoxicity:** None known. **Chronic Toxicity:** None known. **California Prop 65:** N/A **Carcinogen:** NTP: No IARC: No OSHA: No  
**EC Classification (67/548/EEC):** No **Allergens:** None known. **LC-50:** >4000mg/kg—extrapolated from component data. **LD-50:** N/A

**Possible Effects:** None

**Behavior:** Relatively well behaved. Bioaccumulation potential nil.

**Environmental Fate:** Highly unlikely to cause notable contamination. Nontoxic to marine or land organisms.

**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice.

**Container Disposal:** Pails without liner—see Product Disposal section above. Pails with plastic liner—pail may only be disposed of via standard waste disposal services, recycled or reused. Liner—see Product Disposal section above.

Not classified as hazardous for transport. **D.O.T.:** Nonhazardous **UN No.:** Nonhazardous **Air Transport (ICAO & IATA):** Nonhazardous  
**Sea Transport (IMO & IMDG):** Nonhazardous **Road & Rail Transport (ADR/RID):** Nonhazardous

**Labeling Information:** None needed **EC Annex 1 Classification:** Not Applicable. **R Phrases:** R22—harmful if swallowed.

**S Phrases:** None applicable, as known. **Ozone Depleting Chemicals:** Not applicable. **TSCA:** All components are listed.

**WHMIS (Canada):** Not controlled. **Canadian DSL:** All components listed. **40 CFR Part 372 (SARA Section 313):** N/A

**CERCLA:** Nonhazardous **RCRA Hazard Class:** Nonhazardous **SARA 311/312:** None **TSCA 12B Components:** None

SDS first issued. SDS data revised. **New Jersey Right To Know:** See Section II

Signature: *Donald A. Oldiges*  
 Prepared by: Donald A. Oldiges  
 Date Issued: March 22, 2004

As of issue date, the information contained herein is accurate and reliable to the best of JET-LUBE'S knowledge. JET-LUBE® does not warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising out of the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

### LEGEND

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### HMIS SYMBOL

HEALTH	1
FLAMMABILITY	1
REACTIVITY	0
PPI	B

### NFPA SYMBOL



# THE KIRKPATRICK GROUP, INC.

## MATERIAL SAFETY DATA SHEET

**Product Name:** DYNAGARD E  
**Chemical Family:** Lubricating grease  
**Use:** Equipment lubrication, wire rope protector and lubricant

**Manufacturer Under Contract\*:** JET-LUBE, INC.  
**Address:** 4849 Homestead Rd., Ste. #200  
Houston, TX, 77028 USA **Phone:** 713-674-7617  
**Emergency Phone:** 713-674-7617 **Fax:** 713-678-4604  
**Chemtrec 24 hours (USA):** 800-424-9300

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
This material is not considered nonhazardous by OSHA Communication Std 29 CFR 1910.1200. The confidential list of nonhazardous ingredients may be provided upon request.					

### Main Hazards-Health Effects

**Eyes:** May cause irritation. **Inhalation:** Viscous nature may block breathing passages if inhaled. **Ingestion:** May cause diarrhea.  
**Skin:** Possible rash for persons with hypersensitivity.

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help. **Inhalation:** Clear air passage. If respiratory difficulty continues, seek medical help. **Ingestion:** Wash out mouth immediately. Consult physician. **Skin:** Wash thoroughly with hand cleanser, followed by soap & water.

**Extinguishing Media:** Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist. **Unsuitable Extinguishing Media:** Water jet.  
**Protective Equipment for Fire fighting:** Self-contained breathing apparatus.

**Personal Precautions:** Wear gloves & protective overalls. **Environmental Precautions:** None known. **Spillage:** Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

**Handling:** No special handling precautions necessary. **Storage:** Do not store at elevated temperatures.

**Respiratory Protection:** None needed. **Hand Protection:** Protective gloves for hypersensitive persons. **Eye Protection:** Glasses, if applied to parts in motion. **Body Protection:** Overalls.

**Physical State:** Semisolid paste **Color:** Brown **Odor:** Low Odor **pH:** Neutral **Boiling Range/Point °F (°C):** >525 (274)  
**Melting Point °F (°C):** 392 (200) **Flash Point (COC) °F (°C):** >480 (250) **Autoignition Temperature °F (°C):** >500 (260)  
**Explosive Properties:** LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** N/A  
**Vapor Pressure (kPa):** <0.01 **Percent Volatiles:** Nil **Density (g/cm³):** 1.0 **Flammability:** Not flammable at ambient temperature.  
**QAR Value:** N/A **Oxidizing Properties:** None **Water Solubility:** Nil **Vapor Density:** >5

**Stability:** Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition & extreme temps. **Materials to Avoid:** Strong inorganic & organic acids. **Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons & oxides of carbon, sulfur & nitrogen. Residue mainly comprised of soot & mineral oxides.

**Acute Toxicity:** Not known. **Irritancy-Skin:** Very mild. **Skin Sensitization:** Not known. **Subacute/Sub-chronic Toxicity:** Not known.  
**Genotoxicity:** None known. **Chronic Toxicity:** None known. **California Prop 65:** N/A **Carcinogen:** NTP: No IARC: No OSHA: No  
**EC Class (67/548/EEC):** No **Allergens:** None known. **LC-50:** 21,000 ppm-actual **LD-50:** N/A

**Possible Effects:** Highly unlikely to generate fractions that could act as marine pollutants.

**Behavior:** Relatively well behaved. Bioaccumulation potential nil.

**Environmental Fate:** Highly unlikely to cause notable contamination.

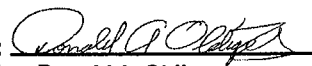
**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice.

**Container Disposal:** Pails without liner—see Product Disposal section above. **Pails with plastic liner—**pail may only be disposed of via standard waste disposal services, recycled or reused. **Liner—**see Product Disposal section above.

Not classified as hazardous for transport. **D.O.T.:** Nonhazardous **UN No.:** Nonhazardous **Air Transport (ICAO & IATA):** Nonhazardous  
**Sea Transport (IMO & IMDG):** Nonhazardous **Road & Rail Transport (ADR/RID):** Nonhazardous

**Labeling Information:** None needed **EC Annex 1 Class:** N/A **R Phrases:** R22—harmful if swallowed. **S Phrases:** None applicable, as known. **Ozone Depleting Chemicals:** Not applicable. **TSCA:** All components are listed. **WHMIS (Canada):** Not controlled.  
**Canadian DSL:** All components listed. **SARA 311/312:** None above reportable limits **TSCA 12B Components:** None above reportable limits  
**40 CFR Part 372 (SARA Section 313):** None above reportable limits **CERCLA:** Nonhazardous **RCRA Hazard Class:** Nonhazardous

SDS first issued. SDS data revised. **New Jersey Right To Know:** See Section II

Signature:   
Prepared by: Donald A. Oldiges  
Date Issued: March 3, 2006

\* All formulations and blending processes proprietary to:

THE KIRKPATRICK GROUP, INC.  
Tel: 972-509-2468  
Fax: 972-509-2554

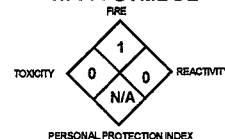
### LEGEND

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- II. COMPOSITION INFORMATION ON INGREDIENTS
- III. HAZARDS IDENTIFICATION
- IV. FIRST AID MEASURES
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### HMIS SYMBOL

HEALTH	0
FLAMMABILITY	1
REACTIVITY	0
PPI	N/A

### NFPA SYMBOL





# MATERIAL SAFETY DATA SHEET

4849 Homestead Road / P.O. Box 21258/Houston, Texas 77226 / 713-674-7617 / E-Mail sales@jetlube.com

HMIS/NFPA

Health: 1

Fire: 1

Reactivity: 0

Personal Protection Index: N/A

## I. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

**Product Name:** FIBER GREASE

**Chemical Family:** Petroleum based lubricating grease.

**Use:** Lubricant additive blend.

**Manufacturer/Supplier:** Jet-Lube, Inc.

**Address:** 4849 Homestead Rd., Suite 200, Houston, TX, USA, 77028

**Phone Number:** 713-674-7617 (FAX: 713-678-4604) 011-44-16286-31913 (England) (780) 463-7441 (Canada)

**Emergency Phone Number:** (713) 674-7617 **Chemtrec (24-HRS U.S.A.):** (800) 424-9300

## II. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Petroleum Oil	64742525/64742570	60-100	Oil Mist TWA-5mg/M <sup>3</sup>	Not Applicable	STEL: 10mg/M <sup>3</sup>
Nonhazardous	82980549 or 7620771 or 3159624	10-20	UN	UN	UN

## III. HAZARDS IDENTIFICATION

**MAIN HAZARDS - Health Effects**

**Eyes:** May cause irritation.

**Ingestion:** May cause diarrhea.

**Skin:** Possible rash for persons with hypersensitivity.

**Inhalation:** Viscous nature may block breathing passages if inhaled.

## IV. FIRST AID MEASURES

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help.

**Skin:** Wash thoroughly with hand cleanser, followed by soap & water. All contaminated clothing should be dry cleaned before reuse.

**Ingestion:** Consult physician.

**Inhalation:** Clear air passage and seek medical help, if respiratory difficulty continues.

## V. FIRE FIGHTING MEASURES

**Extinguishing Media:** Foam, dry powder, halon, carbon dioxide, sand, earth & water mist.

**Unsuitable Extinguishing Media:** Water jet.

**Protective Equipment for Firefighting:** Self-contained breathing apparatus.

## VI. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Wear gloves & protective overalls.

**Environmental Precautions:** Avoid disposal into drains.

**Spillage:** Scrape up bulk, and then pick up residue with diatomaceous earth to avoid a walking hazard.

## VII. HANDLING AND STORAGE

**Handling:** No special handling precautions necessary.

**Storage:** Do not store at elevated temperatures.

## VIII. EXPOSURE CONTROL/PERSONAL PROTECTION

**Respiratory Protection:** None needed.

**Hand Protection:** Protective gloves for hypersensitive persons.

**Eye Protection:** Glasses, if applied to moving parts in motion

**Body Protection:** Overalls.

**IX. PHYSICAL AND CHEMICAL PROPERTIES**

**Physical State:** Fibrous Gel      **Color:** Amber to brown      **Odor:** Petroleum  
**Boiling Range/Point °F(°C):** <600 (316)      **Melting Point °F(°C):** >280 (139)  
**Flash Point (COC) °F(°C):** 430 (221)      **Autoignition Temperature °F(°C):** >500 (260)  
**Explosive Properties:** LEL: 0.9%      UEL: 7%      **Evaporation Rate (Butyl Acetate):** <0.01  
**Partition Coefficient (Log Pow):** Not applicable.      **Vapor Pressure (kPa):** <0.01  
**Density (g/cm<sup>3</sup>):** 0.90      **Flammability:** Not flammable at ambient temperature.  
**Oxidizing Properties:** None.      **Water Solubility:** Slight to none.  
**Vapor Density:** >5      **Percent Volatiles:** Nil      **pH:** Neutral      **OAR Group:** N/A

**X. STABILITY AND REACTIVITY**

**Stability:** Chemically stable under normal conditions. No photoreactive agents.  
**Conditions to Avoid:** Powerful sources of ignition and extreme temperatures.  
**Materials to Avoid:** Strong inorganic & organic acids & oxidizing agents.  
**Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons and oxides of carbon, nitrogen and sulfur. Residue mainly comprised of soot.

**XI. TOXICOLOGICAL INFORMATION**

**Acute Toxicity:** Not known.      **Irritancy - Skin:** Very mild.      **Allergens:** None Known  
**Skin Sensitization:** Not known.      **Sub-acute/Subchronic Toxicity:** Not known.  
**Chronic Toxicity:** None known.      **Genotoxicity:** None known.      **Carcinogens:** None  
**NTP:** No      **IARC:** No      **OSHA:** No      **EC Classification (67/548/EEC):** No  
**California Prop 65 Agents:** None known.  
**LC-50:** >2000 mg/kg (extrapolated from component data)      **LD-50:** Not Applicable

**XII. ECOLOGICAL INFORMATION**

**Possible Effects:** May generate oil fractions that could act as a marine pollutant in extreme cases, but is highly unlikely.  
**Behavior:** Relatively well behaved. Bioaccumulation potential nil.  
**Environmental Fate:** Highly unlikely to cause notable contamination. Nontoxic to marine or land organisms.

**XIII. WASTE DISPOSAL**

**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice.  
**Container Disposal:** Pails without liner see "Product Disposal." Pails with Plastic Liner - pail can only be disposed of via standard waste disposal services, recycled or reused. Liner - see "Product Disposal."

**XIV. TRANSPORT INFORMATION**

Not classified as hazardous for transport.      **D.O.T.:** Nonhazardous  
**UN NO.:** Not Applicable      **ROAD & RAIL TRANSPORT (ADR/RID):** Not Applicable  
**SEA TRANSPORT (IMO & IMDG):** Not Applicable  
**AIR TRANSPORT (ICAO & IATA):** Not Applicable

**XV. REGULATORY INFORMATION**

**Labeling Information:** None needed.      **S Phrases:** None applicable, as known.  
**R Phrases:** R22 harmful if swallowed.      **EC Annex 1 Classification:** Not Applicable  
**Ozone Depleting Chemicals:** N/A      **SARA 311/312:** None      **CERCLA:** Nonhazardous  
**TSCA:** All components are listed.      **WHMIS (Canada):** Not controlled.  
**Canadian DSL:** All components are listed.      **RCRA Hazard Class:** Nonhazardous  
**40 CFR Part 372 (SARA Section 313):** Not Applicable.      **TSCA 12B Components:** None

**XVI. OTHER INFORMATION**

SDS first issued.    SDS data revised.  
**New Jersey Right To Know:** See Section II.

Signature:   
Prepared By: D. A. Oldiges, Technical Director

Date Issued: April 8, 2003

**Disclaimer**

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# JET-LUBE, INC.

## MATERIAL SAFETY DATA SHEET

**Product Name:** JACKING SYSTEM GREASE  
**Chemical Family:** Petroleum based lubricating grease  
**Use:** Equipment lubrication

**Manufacturer/Supplier:** JET-LUBE, INC.  
**Address:** 4849 Homestead Rd., Ste. #200  
Houston, TX, 77028 USA **Phone:** 713-674-7617  
**Emergency Phone:** 713-674-7617 **Fax:** 713-678-4604  
**Chemtrec 24 hours (USA):** 800-424-9300

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Petroleum oil	64742525/64742570	40-60	Oil mist TWA-5mg/M <sup>3</sup>	N/A	STEL: 10mg/M <sup>3</sup>
Nonhazardous Blend	3159624/68411461 7782425/68511502 14807966	20-40	UN	UN	UN

### Main Hazards-Health Effects

**Eyes:** May cause irritation. **Inhalation:** Viscous nature may block breathing passages if inhaled. **Ingestion:** May cause diarrhea.  
**Skin:** For hypersensitive persons, may irritate the skin after prolonged periods of contact.

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help. **Inhalation:** Clear air passage. If respiratory difficulty continues, seek medical help. **Ingestion:** Wash out mouth immediately. Consult physician. **Skin:** Wash thoroughly with hand cleanser, followed by soap & water. Contaminated clothing should be dry cleaned before reuse.

**Extinguishing Media:** Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist. **Unsuitable Extinguishing Media:** Water jet.  
**Protective Equipment for Fire fighting:** Self-contained breathing apparatus.

**Personal Precautions:** Wear gloves & protective overalls. **Environmental Precautions:** Do not allow it to enter drains. **Spillage:** Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

**Handling:** No special handling precautions necessary. **Storage:** Do not store at elevated temperatures.

**Respiratory Protection:** None needed. **Hand Protection:** Protective gloves for hypersensitive persons. **Eye Protection:** Glasses, if applied to parts in motion. **Body Protection:** Overalls.

**Physical State:** Semisolid paste **Color:** Gray to Black **Odor:** Petroleum **pH:** Neutral **Boiling Range/Point °F (°C):** <600 (316)  
**Melting Point °F (°C):** 280 (138) **Flash Point (COC) °F (°C):** >430 (221) **Autoignition Temperature °F (°C):** >500 (260)  
**Explosive Properties:** LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** N/A  
**Vapor Pressure (kPa):** <0.01 **Percent Volatiles:** Nil **Density (g/cm<sup>3</sup>):** 1.045 **Flammability:** Not flammable at ambient temperature.  
**OAR Value:** N/A **Oxidizing Properties:** None **Water Solubility:** Negligible **Vapor Density:** >5

**Stability:** Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition and extreme temperatures. **Materials to Avoid:** Strong inorganic & organic acids, oxidizing agents. **Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons and oxides of carbon, sulfur and nitrogen. Residue mainly comprised of soot & mineral oxides.

**Acute Toxicity:** Not known. **Irritancy-Skin:** Very mild. **Skin Sensitization:** Not known. **Subacute/Sub-chronic Toxicity:** Not known.  
**Genotoxicity:** None known. **Chronic Toxicity:** None known. **California Prop 65:** N/A **Carcinogen:** NTP: No IARC: No OSHA: No  
**EC Classification (67/548/EEC):** No **LC-50:** >2000mg/kg—extrapolated from component data. **LD-50:** Not applicable

**Possible Effects:** Unlikely to act as a marine pollutant.

**Behavior:** Relatively well behaved. Bioaccumulation potential nil.

**Environmental Fate:** Highly unlikely to cause widespread contamination. Nontoxic to marine or land organisms.

**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice. **Container Disposal:** Pails without liner—see Product Disposal section above. **Pails with plastic liner—**pail may only be disposed of via standard waste disposal services, recycled or reused. **Liner—**see Product Disposal section above.

Not classified as hazardous for transport. **D.O.T.:** Nonhazardous **UN No.:** N/A **Air Transport (ICAO & IATA):** N/A  
**Sea Transport (IMO & IMDG):** N/A **Road & Rail Transport (ADR/RID):** N/A

**Labeling Information:** None needed **EC Annex 1 Classification:** Not Applicable. **R Phrases:** R22—harmful if swallowed.

**S Phrases:** None applicable, as known. **Ozone Depleting Chemicals:** Not applicable. **TSCA:** All components are listed.

**WHMIS (Canada):** Not regulated. **Canadian DSL:** All components listed. **40 CFR Part 372 (SARA Section 313):** N/A

**CERCLA:** Nonhazardous **RCRA Hazard Class:** Nonhazardous **SARA 311/312:** None **TSCA 12B Components:** None

SDS first issued. SDS data revised. **New Jersey Right To Know:** See Section II

Signature: \_\_\_\_\_

Prepared by: Donald A. Oldiges  
Date Issued: December 8, 2000

As of issue date, the information contained herein is accurate and reliable to the best of JET-LUBE'S knowledge. JET-LUBE® does not warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising out of the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

### LEGEND

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### HMIS SYMBOL

HEALTH	1
FLAMMABILITY	1
REACTIVITY	0
PPI	N/A

### NFPA SYMBOL



EPAHO106000722

# JET-LUBE, INC.

## MATERIAL SAFETY DATA SHEET

**Product Name:** JET-LUBE® NCS-30 ECF  
**Chemical Family:** Complex grease base  
**Use:** Thread lubricant and sealant.

**Manufacturer/Supplier:** JET-LUBE, INC.  
**Address:** 4849 Homestead Rd., Ste. #200  
Houston, TX, 77028 USA **Phone:** 713-674-7617  
**Emergency Phone:** 713-674-7617 **Fax:** 713-678-4604  
**Chemtrec 24 hours (USA):** 800-424-9300

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Nonhazardous Blend	14807-96-6				
	7789-75-5				
	134636-7-7				
	74869-21-9				
	65996-61-4				

### Main Hazards-Health Effects

**Eyes:** May cause irritation. **Inhalation:** Viscous nature may block breathing passages if inhaled. **Ingestion:** May cause diarrhea.  
**Skin:** For hypersensitive persons, may irritate the skin after prolonged periods of contact.

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help. **Inhalation:** Clear air passage. If respiratory difficulty continues, seek medical help. **Ingestion:** Wash out mouth immediately. Consult physician. **Skin:** Wash thoroughly with hand cleanser, followed by soap & water. Contaminated clothing should be dry cleaned before reuse.

**Extinguishing Media:** Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist. **Unsuitable Extinguishing Media:** Water jet.  
**Protective Equipment for Fire fighting:** Self-contained breathing apparatus.

**Personal Precautions:** Wear gloves & protective overalls. **Environmental Precautions:** Do not allow it to enter drains. **Spillage:** Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

**Handling:** No special handling precautions necessary. **Storage:** Do not store at elevated temperatures.

**Respiratory Protection:** None needed.

**Hand Protection:** Protective gloves for hypersensitive persons.

**Eye Protection:** Glasses, if applied to parts in motion.

**Body Protection:** Overalls.

**Physical State:** Semisolid paste **Color:** Beige **Odor:** Petroleum **pH:** Neutral **Boiling Range/Point °F (°C):** UN  
**Melting Point °F (°C):** >400 (204) **Flash Point (COC) °F (°C):** >430 (221) **Autoignition Temperature °F (°C):** >500 (260)  
**Explosive Properties:** LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** N/A  
**Vapor Pressure (kPa):** <0.01 **V.O.C. Content:** Nil **Density (g/cm³):** 1.26 **Flammability:** Not flammable at ambient temperature.  
**OAR Value:** N/A **Oxidizing Properties:** None **Water Solubility:** Nil **Vapor Density:** >5

**Stability:** Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition & extreme temps. **Materials to Avoid:** Strong inorganic & organic acids, oxidizing & copper reactive agents. **Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons & oxides of carbon, sulfur & nitrogen. Residue mainly comprised of soot & mineral oxides.

**Acute Toxicity:** Not known. **Irritancy-Skin:** Very mild. **Skin Sensitization:** Not known. **Subacute/Sub-chronic Toxicity:** Not known.

**Genotoxicity:** None known. **Chronic Toxicity:** None known. **California Prop 65:** N/A **Carcinogen:** NTP: No IARC: No OSHA: No  
**EC Classification (67/548/EEC):** No **Allergens:** None known. **LC-50:** >4000mg/l - extrapolated from component data. **LD-50:** N/A

**Possible Effects:** None

**Behavior:** Relatively well behaved. Bioaccumulation potential nil.

**Environmental Fate:** Highly unlikely to cause widespread contamination. Nontoxic to marine or land organisms.

**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice.

**Container Disposal:** Pails without liner—see Product Disposal section above. **Pails with plastic liner—**pail may only be disposed of via standard waste disposal services, recycled or reused. **Liner—**see Product Disposal section above.

Not classified as hazardous for transport. **D.O.T.:** Nonhazardous **UN No.:** Nonhazardous **Air Transport (ICAO & IATA):** Nonhazardous  
**Sea Transport (IMO & IMDG):** Nonhazardous **Road & Rail Transport (ADR/RID):** Nonhazardous


**Labeling Information:** None needed **EC Annex 1 Classification:** Not Applicable. **R Phrases:** R22—harmful if swallowed.

**S Phrases:** N/A, as known. **Ozone Depleting Chemicals:** N/A **TSCA:** All components are listed. **TSCA 12B Components:** None

**WHMIS (Canada):** Not controlled. **Canadian DSL:** All components listed. **40 CFR Part 372 (SARA Section 313):** N/A

**SARA 311/312:** None **CERCLA:** Nonhazardous **RCRA Hazard Class:** Nonhazardous

SDS first issued. SDS data revised. **New Jersey Right To Know:** See Section II

Signature:   
Prepared by: Donald A. Oldiges  
Date Issued: June 6, 2007

As of issue date, the information contained herein is accurate and reliable to the best of JET-LUBE'S knowledge. JET-LUBE® does not warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising out of the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

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### HMIS SYMBOL

HEALTH	0
FLAMMABILITY	1
REACTIVITY	0
PPI	B

### NFPA SYMBOL



# JET-LUBE, INC.

## MATERIAL SAFETY DATA SHEET

**Product Name:** JET-LUBE® SEAL-GUARD™ ECF  
**Chemical Family:** Complex grease base  
**Use:** Thread lubricant and sealant.

**Manufacturer/Supplier:** JET-LUBE, INC.  
**Address:** 4849 Homestead Rd., Ste. #200  
Houston, TX, 77028 USA **Phone:** 713-674-7617  
**Emergency Phone:** 713-674-7617 **Fax:** 713-678-4604  
**Chemtrec 24 hours (USA):** 800-424-9300

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
No hazardous compounds	74869-21-9 7789-75-5 7440-44-0; 65996-61-4 74869-21-9	100	N/A	N/A	N/A
Lubricating grease (No carcinogens)					

### Main Hazards—Health Effects

**Eyes:** May cause irritation. **Inhalation:** Viscous nature may block breathing passages if inhaled. **Ingestion:** May cause diarrhea.  
**Skin:** For hypersensitive persons, may irritate the skin after prolonged periods of contact.

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help. **Inhalation:** Clear air passage. If respiratory difficulty continues, seek medical help. **Ingestion:** Wash out mouth immediately. Consult physician. **Skin:** Wash thoroughly with hand cleanser, followed by soap & water. Contaminated clothing should be dry cleaned before reuse.

**Extinguishing Media:** Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist. **Unsuitable Extinguishing Media:** Water jet.  
**Protective Equipment for Fire fighting:** Self-contained breathing apparatus.

**Personal Precautions:** Wear gloves & protective overalls. **Environmental Precautions:** None **Spillage:** Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

**Handling:** No special handling precautions necessary. **Storage:** Do not store at elevated temperatures.

**Respiratory Protection:** None needed.

**Hand Protection:** Protective gloves for hypersensitive persons.

**Eye Protection:** Glasses, if applied to parts in motion.

**Body Protection:** Overalls.

**Physical State:** Semi-solid paste **Color:** Dark Gray to Black **Odor:** Canola **pH:** Neutral **Boiling Range/Point °F (°C):** UN  
**Melting Point °F (°C):** >400 (204) **Flash Point (COC) °F (°C):** >430 (221) **Autoignition Temperature °F (°C):** >500 (260)  
**Explosive Properties:** LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** <1  
**Vapor Pressure (kPa):** <0.01 **Percent Volatiles:** Nil **Density (g/cm³):** 1.28 **Flammability:** Not flammable at ambient temperature.  
**OAR Value:** N/A **Oxidizing Properties:** None **Water Solubility:** Nil **Vapor Density:** >5

**Stability:** Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition & extreme temps. **Materials to Avoid:** Strong inorganic & organic acids, oxidizing agents. **Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons & oxides of carbon, sulfur & nitrogen. Residue mainly comprised of soot & mineral oxides.

**Acute Toxicity:** Not known. **Irritancy—Skin:** Very mild. **Skin Sensitization:** Not known. **Subacute/Sub-chronic Toxicity:** Not known.  
**Genotoxicity:** None known. **Chronic Toxicity:** None known. **California Prop 65:** N/A **Carcinogen:** NTP: No IARC: No OSHA: No  
**EC Classification (67/548/EEC):** No **Allergens:** None known. **LC-50:** >4000mg/kg—extrapolated from component data. **LD-50:** N/A

**Possible Effects:** None

**Behavior:** Relatively well behaved. Bioaccumulation potential nil.

**Environmental Fate:** Highly unlikely to cause notable contamination. Nontoxic to marine or land organisms.

**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice.

**Container Disposal:** Pails without liner—see Product Disposal section above. Pails with plastic liner—pail may only be disposed of via standard waste disposal services, recycled or reused. Liner—see Product Disposal section above.

Not classified as hazardous for transport. **D.O.T.:** Nonhazardous **UN No.:** Nonhazardous **Air Transport (ICAO & IATA):** Nonhazardous  
**Sea Transport (IMO & IMDG):** Nonhazardous **Road & Rail Transport (ADR/RID):** Nonhazardous

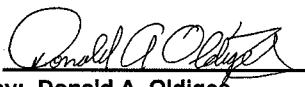
**Labeling Information:** None needed **EC Annex 1 Classification:** Not Applicable. **R Phrases:** R22—harmful if swallowed.

**S Phrases:** None applicable, as known. **Ozone Depleting Chemicals:** Not applicable. **TSCA:** All components are listed.

**WHMIS (Canada):** Not controlled. **Canadian DSL:** All components listed. **40 CFR Part 372 (SARA Section 313):** N/A

**CERCLA:** Nonhazardous **RCRA Hazard Class:** Nonhazardous **SARA 311/312:** None **TSCA 12B Components:** None

SDS first issued. SDS data revised. **New Jersey Right To Know:** See Section II

Signature:   
Prepared by: Donald A. Oldiges  
Date Issued: December 6, 2007

As of issue date, the information contained herein is accurate and reliable to the best of JET-LUBE'S knowledge. JET-LUBE® does not warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising out of the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

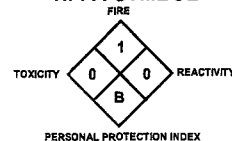
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### HMIS SYMBOL

HEALTH	1
FLAMMABILITY	1
REACTIVITY	0
PPI	B

### NFPA SYMBOL



# JET-LUBE, INC.

## MATERIAL SAFETY DATA SHEET

**Product Name:** **SULFONATE COMPLEX BASE**  
**Chemical Family:** Petroleum based lubricating grease.  
**Use:** Rust inhibiting compound for pipe thread storage.

**Manufacturer/Supplier:** JET-LUBE, INC.  
**Address:** 4849 Homestead Rd., Ste. #200  
 Houston, TX, 77028 USA **Phone:** 713-674-7617  
**Emergency Phone:** 713-674-7617 **Fax:** 713-678-4604  
**Chemtrec 24 hours (USA):** 800-424-9300

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Petroleum Oil	64742525/64742570 26264062/3159624	40-60	Oil mist TWA-5mg/m <sup>3</sup>	N/A	STEL: 10mg/M <sup>3</sup>
Calcium Sulfonates	57855773	40-60	UN	UN	UN
Nonhazardous Blend	471341	2-5	UN	UN	UN

### Main Hazards—Health Effects

**Eyes:** May cause irritation. **Inhalation:** Viscous nature may block breathing passages if inhaled. **Ingestion:** May cause diarrhea.  
**Skin:** Possible rash for persons with hypersensitivity.

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help. **Inhalation:** Clear air passage. If respiratory difficulty continues, seek medical help. **Ingestion:** Consult physician. **Skin:** Wash thoroughly with hand cleanser, followed by soap & water. Contaminated clothing should be dry cleaned before reuse.

**Extinguishing Media:** Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist.

**Unsuitable Extinguishing Media:** Water jet. **Protective Equipment for Fire fighting:** Self-contained breathing apparatus.

**Personal Precautions:** Wear gloves & protective overalls. **Environmental Precautions:** Do not allow it to enter drains.

**Spillage:** Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

**Handling:** No special handling precautions necessary. **Storage:** Do not store at elevated temperatures.

**Respiratory Protection:** None needed.

**Hand Protection:** Protective gloves for hypersensitive persons.

**Eye Protection:** Glasses, if applied to parts in motion.

**Body Protection:** Overalls.

**Physical State:** Semisolid gel **Color:** Tan to Lt. Brown **Odor:** Petroleum **pH:** Neutral **Boiling Range/Point °F (°C):** <600 (316)

**Melting Point °F (°C):** 430 (221) **Flash Point (COC) °F (°C):** 430 (221) **Autoignition Temperature °F (°C):** >500 (260)

**Explosive Properties:** LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** N/A

**Vapor Pressure (kPa):** <0.01 **Percent Volatiles:** Nil **Density (g/cm<sup>3</sup>):** 1.0 **Flammability:** Not flammable at ambient temperature.

**OAR Value:** N/A **Oxidizing Properties:** None **Water Solubility:** Slight, not readily soluble **Vapor Density:** >5

**Stability:** Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition & extreme temperatures. **Materials to Avoid:** Strong inorganic & organic acids, oxidizing agents. **Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons and oxides of carbon, sulfur & nitrogen. Residue mainly comprised of soot & mineral oxides.

**Acute Toxicity:** Not known.

**Irritancy—Skin:** Very mild.

**Skin Sensitization:** Not known.

**Subacute/Sub-chronic Toxicity:** Not known.

**Genotoxicity:** None known.

**Chronic Toxicity:** None known.

**California Prop 65:** N/A **Carcinogen:** NTP: No IARC: No OSHA: No

**EC Classification (67/548/EEC):** No

**LC-50:** >2000mg/kg-extrapolated from component data. **LD-50:** Not applicable

**Allergens:** None known.

**Possible Effects:** In extreme cases, may generate oil fractions that could act as a marine pollutant. Occurrences of this nature are highly unlikely. **Behavior:** Relatively well behaved. Bioaccumulation potential nil. **Environmental Fate:** Highly unlikely to cause widespread contamination. Nontoxic to marine or land organisms.

**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice. **Container Disposal:** Pails without liner—see Product Disposal section above. **Pails with plastic liner—**pail may only be disposed of via standard waste disposal services, recycled or reused. **Liner—**see Product Disposal section above.

Not classified as hazardous for transport. **D.O.T.:** Nonhazardous **UN No.:** Nonhazardous **Air Transport (ICAO & IATA):** Nonhazardous  
**Sea Transport (IMO & IMDG):** Nonhazardous **Road & Rail Transport (ADR/RID):** Nonhazardous

**Labeling Information:** None needed **EC Annex 1 Classification:** Not Applicable. **R Phrases:** R22—harmful if swallowed.

**S Phrases:** None applicable, as known. **Ozone Depleting Chemicals:** Not applicable. **TSCA:** All components are listed.

**WHMIS (Canada):** Not controlled.

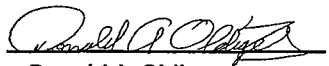
**Canadian DSL:** All components listed. **40 CFR Part 372 (SARA Section 313):** N/A

**CERCLA:** Nonhazardous

**RCRA Hazard Class:** Nonhazardous **SARA 311/312:** None

**TSCA 12B Components:** None

SDS first issued. SDS data revised. **New Jersey Right To Know:** See Section II

Signature:   
 Prepared by: Donald A. Oldiges  
 Date Issued: November 13, 2003

As of issue date, the information contained herein is accurate and reliable to the best of JET-LUBE'S knowledge. JET-LUBE® does not warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising out of the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

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### HMIS SYMBOL

HEALTH	1
FLAMMABILITY	1
REACTIVITY	0
PPI	N/A

### NFPA SYMBOL



# JET-LUBE, INC.

## MATERIAL SAFETY DATA SHEET

**Product Name:** TENSIONER GREASE

**Chemical Family:** Synthetic lubricant

**Use:** Lubricant for bearings, actuator screws, & other airframe equipment

**Manufacturer/Supplier:** JET-LUBE, INC.

**Address:** 4849 Homestead Rd., Ste. #200

Houston, TX, 77028 USA **Phone:** 713-674-7617

**Emergency Phone:** 713-674-7617 **Fax:** 713-678-4604

**Chemtrec 24 hours (USA):** 800-424-9300

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Nonhazardous Blend	68441667/7620771 68037014/68411461 68511502/68649423	60-100	N/A	N/A	STEL: N/A

### Main Hazards—Health Effects

**Eyes:** May cause irritation.

**Ingestion:** May cause diarrhea.

**Inhalation:** Viscous nature may block breathing passages if inhaled.

**Skin:** Possible rash for persons with hypersensitivity.

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help. **Inhalation:** Clear air passage. If respiratory difficulty continues, seek medical help. **Ingestion:** Wash out mouth immediately. Consult physician. **Skin:** Wash thoroughly with hand cleanser, followed by soap & water. Contaminated clothing should be dry cleaned before reuse.

**Extinguishing Media:** Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist. **Unsuitable Extinguishing Media:** Water jet. **Protective Equipment for Fire fighting:** Self-contained breathing apparatus.

**Personal Precautions:** Wear gloves & protective overalls. **Environmental Precautions:** Do not allow it to enter drains. **Spillage:** Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

**Handling:** No special handling precautions necessary. **Storage:** Do not store at elevated temperatures.

**Respiratory Protection:** None needed. **Hand Protection:** Protective gloves for hypersensitive persons. **Eye Protection:** Glasses, if applied to parts in motion. **Body Protection:** Overalls.

**Physical State:** Semisolid gel **Color:** Beige **Odor:** Pungent **pH:** Neutral **Boiling Range/Point °F (°C):** >600 (316)  
**Melting Point °F (°C):** 624 (329) typ. **Flash Point (COC) °F (°C):** >435 (224) **Autoignition Temperature °F (°C):** >500 (260)  
**Explosive Properties:** LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** N/A  
**Vapor Pressure (kPa):** <0.01 **% Volatiles:** Nil **Density (g/cm³):** 0.88 **Flammability:** Not flammable at ambient temperature.  
**OAR Value:** N/A **Oxidizing Properties:** None **Water Solubility:** Not soluble **Vapor Density:** >5

**Stability:** Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition & extreme temps. **Materials to Avoid:** Strong inorganic & organic acids, oxidizing agents. **Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons & oxides of carbon. Residue mainly comprised of soot & mineral oxides.

**Acute Toxicity:** Not known. **Irritancy—Skin:** Not known **Skin Sensitization:** Not known. **Subacute/Sub-chronic Toxicity:** Not known. **Genotoxicity:** None known. **Chronic Toxicity:** None known. **California Prop 65:** N/A **Carcinogen:** NTP: No IARC: No OSHA: No **EC Class (67/548/EEC):** No **Allergens:** None known. **LC-50:** >4000mg/l-extrapolated from component data (mysidopsis bahia). **LD-50:** N/A

**Possible Effects:** None

**Behavior:** Relatively well behaved. Bioaccumulation almost nil.

**Environmental Fate:** Highly unlikely to cause notable contamination. Nontoxic to marine or land organisms.

**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice. **Container Disposal:** Pails without liner—see Product Disposal section above. Pails with plastic liner—pail may only be disposed of via standard waste disposal services, recycled or reused. **Liner—see Product Disposal section above.**

Not classified as hazardous for transport. **D.O.T.:** Nonhazardous **UN No.:** Nonhazardous **Air Transport (ICAO & IATA):** Nonhazardous **Sea Transport (IMO & IMDG):** Nonhazardous **Road & Rail Transport (ADR/RID):** Nonhazardous

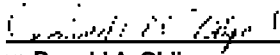
**Labeling Information:** None needed **EC Annex 1 Classification:** Not Applicable. **R Phrases:** R22—harmful if swallowed.

**S Phrases:** None applicable, as known. **Ozone Depleting Chemicals:** Not applicable. **TSCA:** All components are listed.

**WHMIS (Canada):** Not controlled **Canadian DSL:** All components listed. **40 CFR Part 372 (SARA Section 313):** N/A

**CERCLA:** Nonhazardous **RCRA Hazard Class:** Nonhazardous **SARA 311/312:** None **TSCA 12B Components:** None

SDS first issued. SDS data revised. **New Jersey Right To Know:** See Section II

**Signature:**   
**Prepared by:** Donald A. Oldiges  
**Date Issued:** July 29, 2004

As of issue date, the information contained herein is accurate and reliable to the best of JET-LUBE'S knowledge. JET-LUBE® does not warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising out of the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

### LEGEND

- IDENTIFICATION OF THE SUBSTANCE/Preparation AND COMPANY
- COMPOSITION INFORMATION ON INGREDIENTS
- HAZARDS IDENTIFICATION
- FIRST AID MEASURES
- FIRE FIGHTING MEASURES
- ACCIDENTAL RELEASE MEASURES
- HANDLING AND STORAGE
- EXPOSURE CONTROL/PERSONAL PROTECTION
- PHYSICAL AND CHEMICAL PROPERTIES
- STABILITY AND REACTIVITY
- TOXICOLOGICAL INFORMATION
- ECOLOGICAL INFORMATION
- WASTE DISPOSAL
- TRANSPORT INFORMATION
- REGULATORY INFORMATION
- OTHER INFORMATION

### HMIS SYMBOL

HEALTH	0
FLAMMABILITY	1
REACTIVITY	0
PPI	

### NFPA SYMBOL



# JET-LUBE, INC.

## MATERIAL SAFETY DATA SHEET

**Product Name:** TF-15® Concentrate

**Chemical Family:** Petroleum based lubricating grease

**Use:** Tubing, casing and line pipe sealant.

**Manufacturer/Supplier:** JET-LUBE, INC.

**Address:** 4849 Homestead Rd., Ste. #200

Houston, TX, 77028 USA **Phone:** 713-674-7617

**Emergency Phone:** 713-674-7617 **Fax:** 713-678-4604

**Chemtrec 24 hours (USA):** 800-424-9300

### Hazardous Components

Petroleum oil CAS No. 64741964/64742570

Nonhazardous Blend

82980549/7620771

12001262/9002840

Wt%

40 - 60

30-60

OSHA PEL

Oil mist

UN

ACGIH TLV

N/A

UN

Other Limits of Exposure

STEL: 10mg/M³

UN

### Main Hazards-Health Effects

**Eyes:** May cause irritation. **Inhalation:** Viscous nature may block breathing passages if inhaled. **Ingestion:** May cause diarrhea.

**Skin:** Possible rash for persons with hypersensitivity.

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help. **Inhalation:** Clear air passage. If respiratory difficulty continues, seek medical help. **Ingestion:** Wash out mouth immediately. Consult physician. **Skin:** Wash thoroughly with hand cleanser, followed by soap & water. Contaminated clothing should be dry cleaned before reuse.

**Extinguishing Media:** Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist.

**Unsuitable Extinguishing Media:** Water jet. **Protective Equipment for Fire fighting:** Self-contained breathing apparatus.

**Personal Precautions:** Wear gloves & protective overalls. **Environmental Precautions:** Do not allow it to enter drains.

**Spillage:** Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

**Handling:** No special handling precautions necessary. **Storage:** Do not store at elevated temperatures.

**Respiratory Protection:** None needed.

**Hand Protection:** Protective gloves for hypersensitive persons.

**Eye Protection:** Glasses, if applied to parts in motion.

**Body Protection:** Overalls.

**Physical State:** Grainy, Semisolid paste **Color:** Beige to Black **Odor:** Pungent **pH:** Neutral **Boiling Range/Point °F (°C):** >525 (274)

**Melting Point °F (°C):** >450 (232) **Flash Point (COC) °F (°C):** >430 (221) **Autoignition Temperature °F (°C):** >500 (260)

**Explosive Properties:** LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** N/A

**Vapor Pressure (kPa):** <0.01 **Percent Volatiles:** Nil **Density (g/cm³):** 1.21 **Flammability:** Not flammable at ambient temperature.

**OAR Value:** N/A **Oxidizing Properties:** None **Water Solubility:** Nil **Vapor Density:** >5

**Stability:** Chemically stable under normal conditions. No photoreactive agents.

**Conditions to Avoid:** Powerful sources of

ignition & extreme temperatures. **Materials to Avoid:** Strong inorganic & organic acids, oxidizing agents.

**Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons, fluorinated gases, and oxides of carbon, sulfur & nitrogen. Residue mainly comprised of soot & mineral oxides.

**Acute Toxicity:** Not known.

**Irritancy-Skin:** Very mild.

**Skin Sensitization:** Not known.

**Subacute/Sub-chronic Toxicity:** Not known.

**Genotoxicity:** None known.

**Chronic Toxicity:** None known.

**California Prop 65:** N/A **Carcinogen:** NTP: No IARC: No OSHA: No

**EC Class (67/548/EEC):** No

**Allergens:** None known. **LC-50:** 1.98g/lt-(mysidopsis bahia) based on assessment from related products.

**LD-50:** N/A

**Possible Effects:** In extreme cases, may generate oil fractions that could act as a marine pollutant, but is highly unlikely.

**Behavior:** Relatively well behaved. Bioaccumulation potential nil. **Environmental Fate:** Highly unlikely to cause widespread contamination.

**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice.

**Container Disposal:** Pails without liner—see Product Disposal section above. Pails with plastic liner—pail may only be disposed of via standard waste disposal services, recycled or reused. **Liner—see Product Disposal section above.**

Not classified as hazardous for transport.

**D.O.T.:** Nonhazardous **UN No.:** N/A

**Air Transport (ICAO & IATA):** N/A

**Sea Transport (IMO & IMDG):** N/A **Road & Rail Transport (ADR/RID):** N/A

**Labeling Information:** None needed

**EC Annex 1 Classification:** N/A

**R Phrases:** R22—harmful if swallowed.

**S Phrases:** N/A, as known.

**Ozone Depleting Chemicals:** N/A

**TSCA:** All components are listed.

**WHMIS (Canada):** Not regulated.

**Canadian DSL:** All components listed.

**TSCA 12B Components:** None

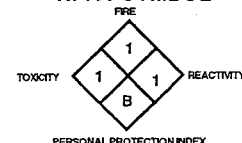
**40 CFR Part 372 (SARA Section 313):** N/A **CERCLA:** Nonhazardous **RCRA Hazard Class:** Nonhazardous **SARA 311/312:** None

SDS first issued. SDS data revised. **New Jersey Right To Know:** See Section II

### HMIS SYMBOL

HEALTH	1
FLAMMABILITY	1
REACTIVITY	1
PPI	B

### NFPA SYMBOL



### LEGEND

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- V. FIRE FIGHTING MEASURES
- VI. ACCIDENTAL RELEASE MEASURES
- VII. HANDLING AND STORAGE
- VIII. EXPOSURE CONTROL/PERSONAL PROTECTION
- IX. PHYSICAL AND CHEMICAL PROPERTIES
- X. STABILITY AND REACTIVITY
- XI. TOXICOLOGICAL INFORMATION
- XII. ECOLOGICAL INFORMATION
- XIII. WASTE DISPOSAL
- XIV. TRANSPORT INFORMATION
- XV. REGULATORY INFORMATION
- XVI. OTHER INFORMATION

Signature:

Prepared by: Donald A. Oldiges

Date Issued: January 15, 2003

As of issue date, the information contained herein is accurate and reliable to the best of JET-LUBE'S knowledge. JET-LUBE® does not warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising out of the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

EPAHO106000727

# JET-LUBE, INC.

## MATERIAL SAFETY DATA SHEET

**Product Name:** ROYAL PURPLE SYNTHETIC BASE  
**Chemical Family:** Parasyntetic fluid based lubricating grease.  
**Use:** Equipment lubrication

**Manufacturer/Supplier:** JET-LUBE, INC.  
**Address:** 4849 Homestead Rd., Ste. #200  
Houston, TX, 77028 USA **Phone:** 713-674-7617  
**Emergency Phone:** 713-674-7617 **Fax:** 713-678-4604  
**Chemtrec 24 hours (USA):** 800-424-9300

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Base fluids	64742525/68037014 68187848	60-100	Oil mist TWA-5mg/M <sup>3</sup>	N/A	N/A
Nonhazardous Blend	94166877/26780961 9003296	5-10	UN	UN	UN

### Main Hazards-Health Effects

**Eyes:** May cause irritation. **Inhalation:** Viscous nature may block breathing passages if inhaled. **Ingestion:** May cause diarrhea.  
**Skin:** For hypersensitive persons, may irritate the skin after prolonged periods of contact.

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help. **Inhalation:** Clear air passage. If respiratory difficulty continues, seek medical help. **Ingestion:** Wash out mouth immediately. Consult physician. **Skin:** Wash thoroughly with hand cleanser, followed by soap & water. Contaminated clothing should be dry cleaned before reuse.

**Extinguishing Media:** Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist. **Unsuitable Extinguishing Media:** Water jet.  
**Protective Equipment for Fire fighting:** Self-contained breathing apparatus.

**Personal Precautions:** Wear gloves & protective overalls. **Environmental Precautions:** Do not allow it to enter drains. **Spillage:** Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

**Handling:** No special handling precautions necessary. **Storage:** Do not store at elevated temperatures.

**Respiratory Protection:** None needed. **Hand Protection:** Protective gloves for hypersensitive persons. **Eye Protection:** Glasses, if applied to parts in motion. **Body Protection:** Overalls.

**Physical State:** Adhesive Semisolid paste **Color:** Amber **Odor:** Petroleum **pH:** Neutral **Boiling Range/Point °F (°C):** <600 (316)  
**Melting Point °F (°C):** 500 (260) typical **Flash Point (COC) °F (°C):** >430 (221) **Autoignition Temperature °F (°C):** >500 (260)  
**Explosive Properties:** LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** N/A  
**Vapor Pressure (kPa):** <0.01 **Percent Volatiles:** Nil **Density (g/cm<sup>3</sup>):** 0.89 **Flammability:** Not flammable at ambient temperature.  
**QAR Value:** N/A **Oxidizing Properties:** None **Water Solubility:** Nil **Vapor Density:** >5

**Stability:** Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition & extreme temperatures. **Materials to Avoid:** Strong inorganic & organic acids, oxidizing agents. **Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons & oxides of carbon, sulfur & nitrogen. Residue mainly comprised of soot & mineral oxides.

**Acute Toxicity:** Not known. **Irritancy-Skin:** Very mild. **Skin Sensitization:** Not known. **Subacute/Sub-chronic Toxicity:** Not known.  
**Genotoxicity:** None known. **Chronic Toxicity:** None known. **California Prop 65:** N/A **Carcinogen:** NTP: No IARC: No OSHA: No  
**EC Classification (67/548/EEC):** No **LC-50:** >4000mg/l—extrapolated from component data. **LD-50:** Not applicable

**Possible Effects:** None

**Behavior:** Relatively well behaved. Bioaccumulation potential nil.

**Environmental Fate:** Highly unlikely to cause widespread contamination. Nontoxic to marine or land organisms.

**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice. **Container Disposal:** Pails without liner—see Product Disposal section above. Pails with plastic liner—pail may only be disposed of via standard waste disposal services, recycled or reused. **Liner**—see Product Disposal section above.

Not classified as hazardous for transport. **D.O.T.:** Nonhazardous **UN No.:** Nonhazardous **Air Transport (ICAO & IATA):** Nonhazardous  
**Sea Transport (IMO & IMDG):** Nonhazardous **Road & Rail Transport (ADR/RID):** Nonhazardous

**Labeling Information:** None needed **EC Annex 1 Classification:** Not Applicable. **R Phrases:** R22—harmful if swallowed.  
**S Phrases:** None applicable, as known. **Ozone Depleting Chemicals:** N/A **TSCA:** All components are listed. **SARA 311/312:** None  
**WHMIS (Canada):** Not controlled. **Canadian DSL:** All components listed. **40 CFR Part 372 (SARA Section 313):** None  
**CERCLA:** Nonhazardous **RCRA Hazard Class:** Nonhazardous **TSCA 12B Components:** None

SDS first issued. SDS data revised. **New Jersey Right To Know:** See Section II

Signature: 

Prepared by: Donald A. Oldiges

Date Issued: October 1, 2004

As of issue date, the information contained herein is accurate and reliable to the best of JET-LUBE'S knowledge. JET-LUBE® does not warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising out of the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

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- TOXICOLOGICAL INFORMATION
- ECOLOGICAL INFORMATION
- WASTE DISPOSAL
- TRANSPORT INFORMATION
- REGULATORY INFORMATION
- OTHER INFORMATION

### HMIS SYMBOL

HEALTH	0
FLAMMABILITY	1
REACTIVITY	0
PPI	B

### NFPA SYMBOL



# JET-LUBE, INC.

## MATERIAL SAFETY DATA SHEET

**Product Name:** WHITE LITHIUM GREASE  
**Chemical Family:** Petroleum based lubricating grease  
**Use:** Equipment lubrication.  
**Qualifications:** USDA H-2

**Manufacturer/Supplier:** JET-LUBE, INC.  
**Address:** 4849 Homestead Rd., Ste. #200  
 Houston, TX, 77028 USA **Phone:** 713-674-7617  
**Emergency Phone:** 713-674-7617 **Fax:** 713-678-4604  
**Chemtrec 24 hours (USA):** 800-424-9300

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Petroleum Oil	64742525/64742014	60-100	Oil Mist TWA-5mg/M <sup>3</sup>	N/A	STEL: 10mg/M <sup>3</sup>
Nonhazardous Blend	9002840/28689665 1314132/13463677 7620771	10-20 8	UN 15mg/M <sup>3</sup>	UN 10mg/M <sup>3</sup>	UN UN
Petroleum Solvent (aerosol)	64742898/110543	20-50	TWA 400 ppm	300 ppm	STEL: 400 ppm
Hydrocarbon Propellant (aerosol)	68476857	25	1,000 ppm	1,000 ppm	

### Main Hazards-Health Effects

**Eyes:** May cause irritation. **Inhalation:** Viscous nature may block breathing passages if inhaled. **Ingestion:** May cause diarrhea.  
**Skin:** For hypersensitive persons, may irritate the skin after prolonged periods of contact.

**Eyes:** Flush with water until all residual material is gone. If irritation persists, seek medical help. **Inhalation:** Clear air passage. If respiratory difficulty continues, seek medical help. **Ingestion:** Wash out mouth immediately. Consult physician. **Skin:** Wash thoroughly with hand cleanser, followed by soap & water. Contaminated clothing should be dry cleaned before reuse.

**Extinguishing Media:** Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist.

**Unsuitable Extinguishing Media:** Water jet. **Protective Equipment for Fire fighting:** Self-contained breathing apparatus.

**Personal Precautions:** Wear gloves & protective overalls.

**Environmental Precautions:** Do not allow it to enter drains.

**Spillage:** Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

**Handling:** No special handling precautions necessary. **Storage:** Do not store at elevated temperatures.

**Respiratory Protection:** None needed.

**Hand Protection:** Nitrile gloves for hypersensitive persons.

**Eye Protection:** Glasses, if applied to parts in motion.

**Body Protection:** Overalls.

**Physical State:** Semisolid paste **Color:** White/Ivory **Odor:** Petroleum **pH:** Neutral **Boiling Range/Point °F (°C):** <600 (316)

**Melting Point °F (°C):** 392 (200) **Flash Point (COC) °F (°C):** 430 (221) **Autoignition Temperature °F (°C):** >500 (260)

**Explosive Properties:** LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** N/A

**Vapor Pressure (kPa):** <0.01 **% Volatiles:** Bulk Nil Aero 75% **Density (g/cm<sup>3</sup>):** 0.95 **Flammability:** Bulk Nonflammable

**Aero Flammable:** OAR Value: Bulk N/A Aero 5 **Oxidizing Properties:** None **Water Solubility:** Slight **Vapor Density:** >5

**Stability:** Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition and extreme temps. **Materials to Avoid:** Strong inorganic & organic acids, oxidizing agents. **Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons and oxides of carbon, sulfur & nitrogen. Residue mainly comprised of soot & mineral oxides.

**Acute Toxicity:** Possible-Mild **Irritancy-Skin:** Very mild. **Skin Sensitization:** Not known. **Subacute/Sub-chronic Toxicity:** Not known

**Genotoxicity:** None known **Chronic Toxicity:** None known **California Prop 65:** N/A **Carcinogen:** NTP: No IARC: No **OSHA:** No

**EC Class (67/548/EEC):** No **Allergens:** None known **LC-50:** >2000mg/kg-extrapolated from component data (Mysidopsis Bahia) **LD-50:** N/A

**Possible Effects:** In extreme cases, may generate oil fractions that could act as a marine pollutant, which are highly unlikely. **Behavior:** Relatively well behaved. Bioaccumulation potential nil. **Environmental Fate:** Highly unlikely to cause contamination. Nontoxic to marine or land organisms.

**Product Disposal:** Do not incinerate. Contact waste disposal company or local authority for advice. **Container Disposal:** Pails without liner-see Product Disposal section above. **Pails with plastic liner-pail** may only be disposed of via standard waste disposal services, recycled or reused. **Liner-see Product Disposal section above. Aerosols-consult local authority.**

**D.O.T.:** Bulk Nonhazardous Aero UN1950 **UN No.:** Bulk Nonhazardous Aero 195, Class 2.1 **Air Transport (ICAO & IATA):** Bulk Nonhazardous

**Aero Hazardous-pressurized container:** **Sea Transport (IMO & IMDG):** Bulk Nonhazardous Aero UN1950 Class 2

**Road & Rail Transport (ADR/RID):** Bulk Nonhazardous Aero UN1950 Class 2.1


**Labeling Information:** None needed **EC Annex 1 Class:** N/A **R Phrases:** R22-harmful if swallowed. **S Phrases:** Bulk N/A

**Aero S3** keep in cool place, S2 keep away from children. **Ozone Depleting Chemicals:** N/A **TSCA 12B Components:** None

**TSCA:** All components are listed. **WHMIS (Canada):** Not regulated. **Canadian DSL:** All components listed. **SARA 311/312:** None

**40 CFR Part 372 (SARA Section 313):** Zinc oxide **CERCLA:** Nonhazardous **RCRA Hazard Class:** Nonhazardous

**New Jersey Right To Know:** See Section II

Signature:   
 Prepared by: Donald A. Oldiges  
 Date Issued: February 24, 2005

As of issue date, the information contained herein is accurate and reliable to the best of JET-LUBE'S knowledge. JET-LUBE® does not warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising out of the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

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VIII.	EXPOSURE CONTROL/PERSONAL PROTECTION
IX.	PHYSICAL AND CHEMICAL PROPERTIES
X.	STABILITY AND REACTIVITY
XI.	TOXICOLOGICAL INFORMATION
XII.	ECOLOGICAL INFORMATION
XIII.	WASTE DISPOSAL
XIV.	TRANSPORT INFORMATION
XV.	REGULATORY INFORMATION
XVI.	OTHER INFORMATION

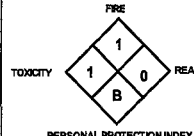
### HMIS SYMBOL

HEALTH	1
FLAMMABILITY	1
REACTIVITY	0
PPI	B

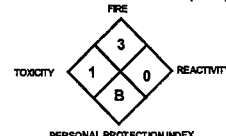
### HMIS SYMBOL (aero)

HEALTH	1
FLAMMABILITY	3
REACTIVITY	0
PPI	B

### NFPA SYMBOL



### NFPA SYMBOL (aero)



2937  
Afton Chemical Corporation



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Material / Product Approval Letter

Date 8/21/2008

Dear Ed Cox

Thank you for choosing CES Environmental Services, Inc. for your material / product recycling needs. The following material has been approved at our facility in Houston, TX. If the material received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # 2937

Expiration Date 8/21/2010

Producer: Afton Chemical Corporation

Address:

Suget, IL 62201

### Material / Product Information

Name of Material / Product hitec 348 performance additive

Container Type:

Detailed Description of Process Generating or Producing the Material / Product:

out of date product

Color: yellow

Odor: sulfurous

pH: neutral

Physical State:

Incompatibilities: strong oxidizers

Safety Related Data/Special Handling:

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000731



**CES Environmental  
Services, Inc.**

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676

<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

JB

**SECTION 1: Material Producer Information**

Company: Afton Chemical Corporation  
Address: 501 Monsanto Avenue  
City, State, Zip: Suget, IL 66201  
Contact: Ed Cox Title:  
Phone No: (618) 583-1078 Fax No: (618) 583-1388  
24/hr Phone: (618) 583-1078  
U.S. EPA I.D. No: na  
State I.D. na SIC Code: na

**SECTION 2: Billing Information - ☒ Same as Above**

Company:  
Address:  
City, State, Zip:  
Contact: Title:  
Phone No: Fax No:

**SECTION 3: General Description of the Material / Product**

Name of Material / Product: Hitec 348 Performance Additive

Detailed Description of Process Generating or Producing the Material / Product: \_\_\_\_\_

out of date product

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: Yellow

Odor: Sulfurous

Specific Gravity (water=1): .959 Density: 8 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☐ Single-phase ☒ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Container Size: 55 gal

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☒ Yearly

Number of Units (containers): 4 Other: \_\_\_\_\_

Proper U.S. DOT Shipping Name: Product Non RCRA Non DOT Regulated Material

Class: na UN/NA: na PG: na RQ: na

Flash Point 2140	pH Neutral	N/A	N/A	Solids 1 %
Oil & Grease 7500 mg/l	TOC 46500 mg/l	Zinc 0 mg/l	Copper 0 mg/l	Nickel 0 mg/l

#### SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	Concentration	Units
The material / product consists of the following materials	Ranges are acceptable	or %
Mineral oil	10-19.9	%
Methacrylate copolymer	5-8.9	%
Alkyl polysulfides	1-4.4	%
Long chain Alkyl Amines	1-4.9	%
Alkyl phosphate	1-4.4	%
Long-chain Alkyl Amine	1-4.9	%

See MSDS for balance  
SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.  
Standard

#### SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.  
HiTEC 348 MSDS

#### SECTION 7: Incompatibilities

Please list all incompatibilities (if any):  
Strong Oxidizers

#### SECTION 8: Material Producer's Certification

The information contained herein is based on ☐ generator knowledge and/or ☒ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name/Title: \_\_\_\_\_

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: <u>Richard E. Hurd</u>	
Date: <u>8-21-08</u>	Approved Rejected
Approval Number: <u>2937</u>	

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. Base Pricing (including freight):

If brought in By CES on PCI back haul: no charge/  
no payment.  
If brought in by outside transporter at customer expense:  
pay \$0.15/gal

2. Contamination Limits (maximum limit before surcharges apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

Record quantity in each drum. Number each drum  
and record amount and product type on inventory  
list.

5. Treatment and Handling Protocol:

Once inventory has been given to product sales,  
the material will be resold as is, ~~according to~~  
directed by product sales person.

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A      ☐ Subcategory B      ☐ Subcategory C

7. Tests for Product Recovered/Recycled (if applicable):

see special testing requirements

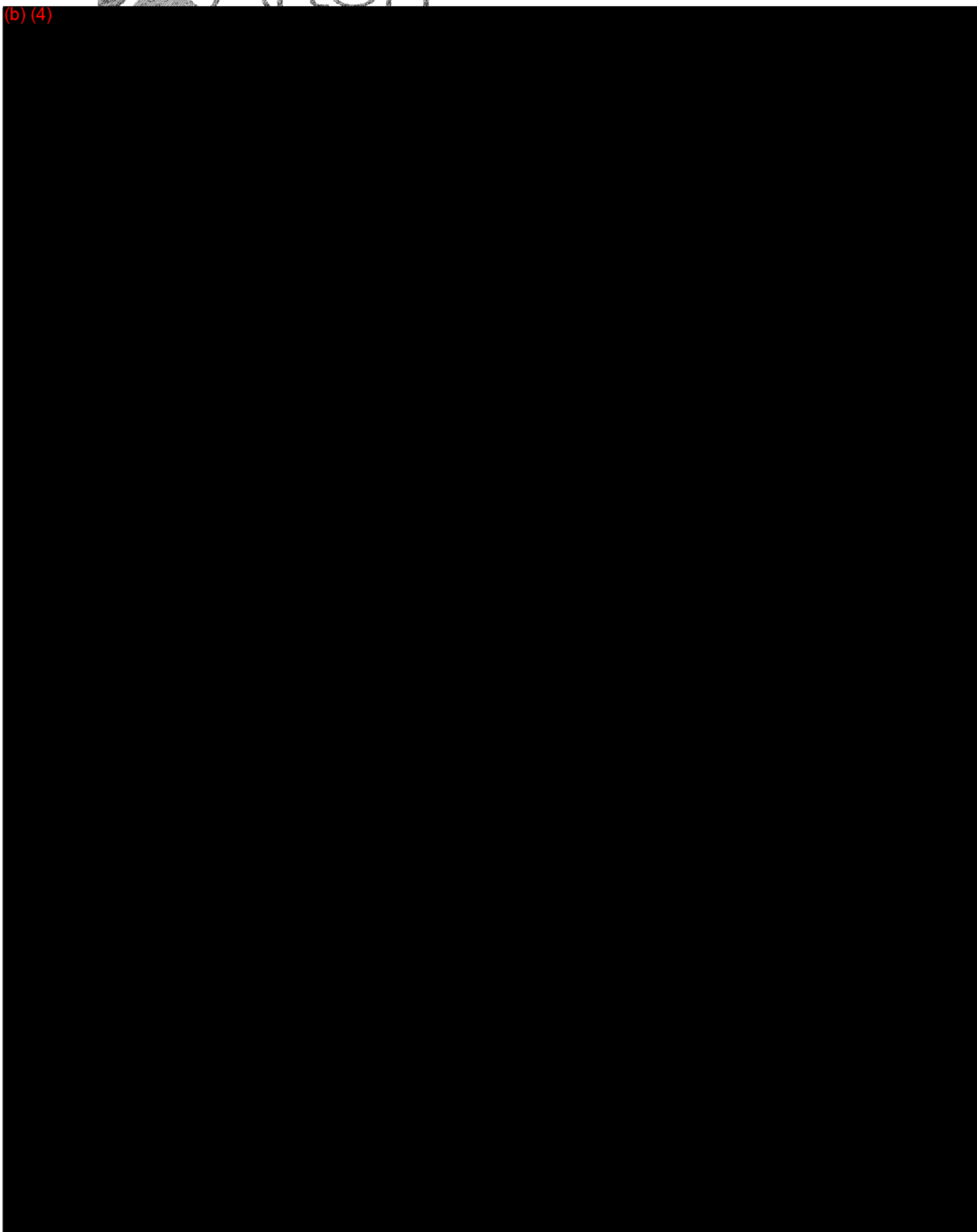
8. Management for Product Recovered/Recycled (if applicable):

see treatment & handling protocol



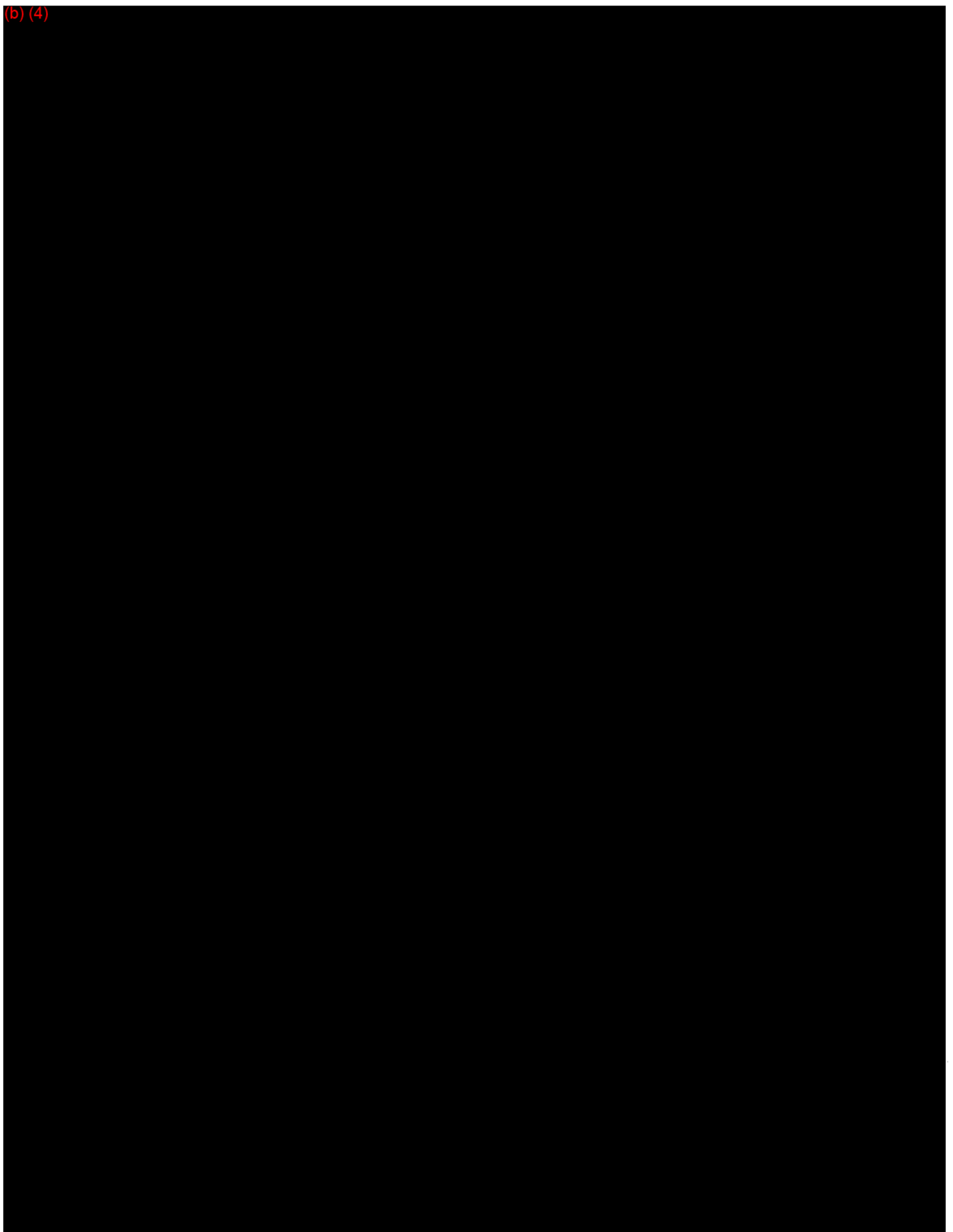
## Material Safety Data Sheet

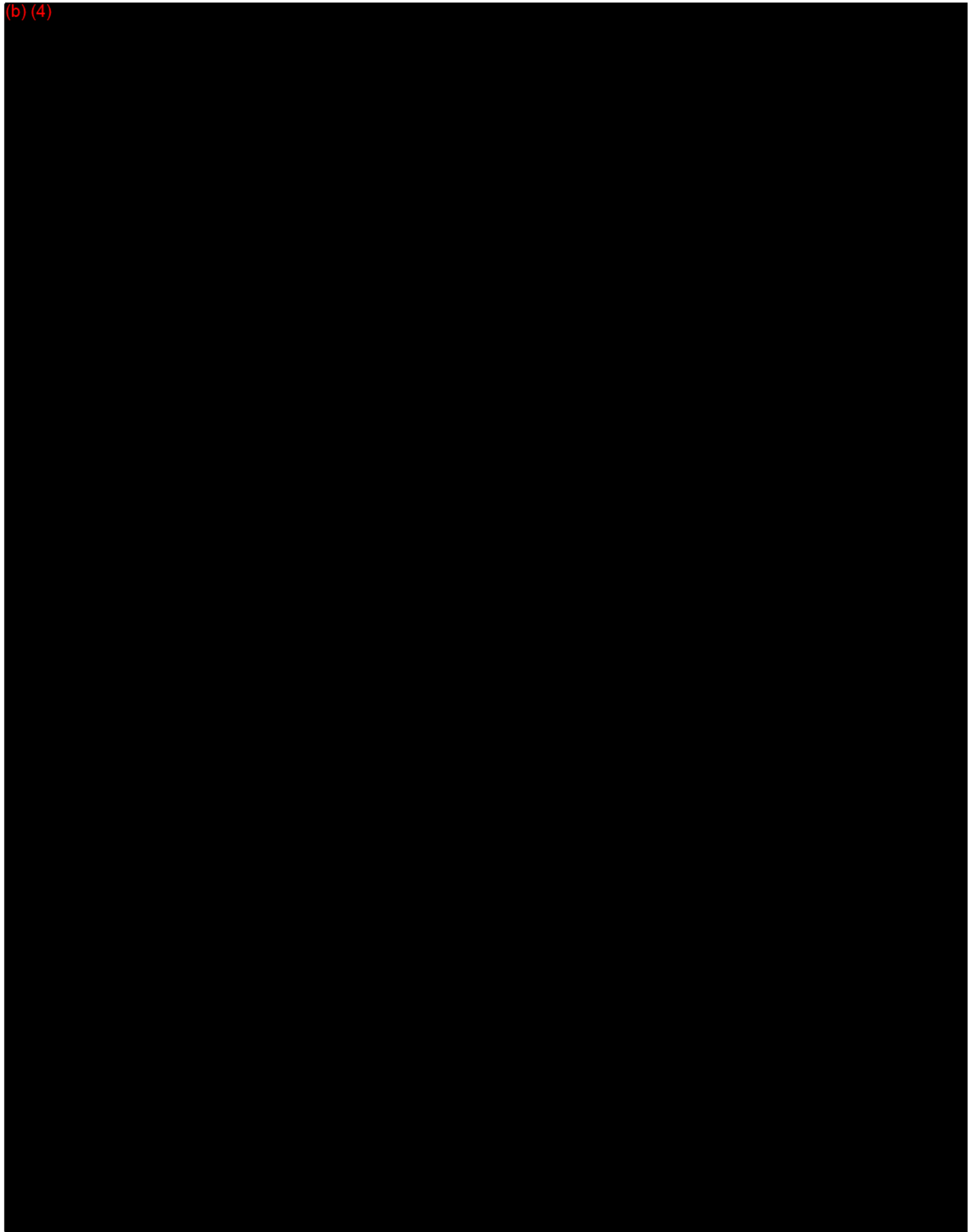
(b) (4)



(b) (4)







(b) (4)



\*\*\* END OF MSDS \*\*\*

BR



**CES Environmental  
Services, Inc.**

4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

AL

## Material / Product Approval Letter

Date 8/21/2008

Dear Ed Cox

Thank you for choosing CES Environmental Services, Inc. for your material / product recycling needs. The following material has been approved at our facility in Houston, TX. If the material received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # 2937

Expiration Date 8/21/2010

Modified

**Producer:** Afton Chemical Corporation

**Address:**

Suget, IL 62201

### Material / Product Information

**Name of Material / Product** hitec 348 performance additive

Additive - Non HERS / Non DOT

**Container Type:**

### **Detailed Description of Process Generating or Producing the Material / Product:**

out of date product

**Color:** yellow

**Odor:** sulfurous

**pH:** neutral

**Physical State:**

**Incompatibilities:** strong oxidizers

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000741



**CES Environmental  
Services, Inc.**

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
http://www.cesenvironmental.com

TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

JB

**SECTION 1: Material Producer Information**

Company: Afton Chemical Corporation  
Address: 501 Monsanto Avenue  
City, State, Zip: Suget, IL 66201  
Contact: Ed Cox Title:  
Phone No: (618) 583-1078 Fax No: (618) 583-1388  
24/hr Phone: (618) 583-1078  
U.S. EPA I.D. No: na  
State I.D. na SIC Code: na

**SECTION 2: Billing Information - ☒ Same as Above**

Company:  
Address:  
City, State, Zip:  
Contact: Title:  
Phone No: Fax No:

**SECTION 3: General Description of the Material / Product**

Name of Material / Product: Additives - Non RCRA/Non DOT  
Detailed Description of Process Generating or Producing the Material / Product: out of date product / off-spec product

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: varies Odor: varies

Specific Gravity (water=1): varies Density varies lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☒ Single-phase Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)  
Container Size: 55 gal

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☒ Yearly  
Number of Units (containers): varies Other: Product

Proper U.S. DOT Shipping Name: Non RCRA Non DOT Regulated Material

Class: na UN/NA: na PG: na RQ: na

Flash Point 7140	pH 3-11	N/A	N/A	Solids 1 %
Oil & Grease 71500 mg/l	TOC 46500 mg/l	Zinc 0 mg/l	Copper 0 mg/l	Nickel 0 mg/l

#### SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	Concentration	Units
The material / product consists of the following materials	Ranges are acceptable	or %
Performance / Fuel Additive	100	90
(See MSDS)		90
		90
		90
		90
		90

See MSDS on shared drive

#### SECTION 5: Safety related Data

If the handling of this material / product requires the use of special protective equipment, please explain.  
Standard

#### SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.

11 files MSDS located on shared drive: Customer MSDS: Afton

#### SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

Strong Oxidizers

#### SECTION 8: Material Producer's Certification

The information contained herein is based on ☐ generator knowledge and/or ☒ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: No signature required-product Date: \_\_\_\_\_

Printed Name/Title: \_\_\_\_\_

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: <u>[Signature]</u>	
Date: <u>5-21-08</u>	Approved Rejected
Approval Number: <u>2937</u>	

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. Base Pricing (including freight):

If brought in By CES on PCI back haul: no charge/  
no payment.  
If brought in by outside transporter at customer expense:  
pay \$0.15/gal Pay \$0.019/pound

2. Contamination Limits (maximum limit before surcharges apply):

If drums are damaged and are in an over pack then it  
operations determines too many man hours are needed  
to recover the material then there will be no payment.

3. Surcharge Pricing:

4. Special Testing Requirements:

Record quantity in each drum. Number each drum  
and record amount and product type on inventory  
list. ~~Let the Lab know the gallons from the gallons the Lab needs to~~  
~~generate a lab inbound. to report the gallons. Run a density & pH. Because~~  
~~is also required to record the total gallons received.~~

5. Treatment and Handling Protocol:

Once inventory has been given to product sales,  
the material will be resold as is, ~~according to~~  
directed by product sales person.

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A      ☐ Subcategory B      ☐ Subcategory C

7. Tests for Product Recovered/Recycled (if applicable):

see special testing requirements

8. Management for Product Recovered/Recycled (if applicable):

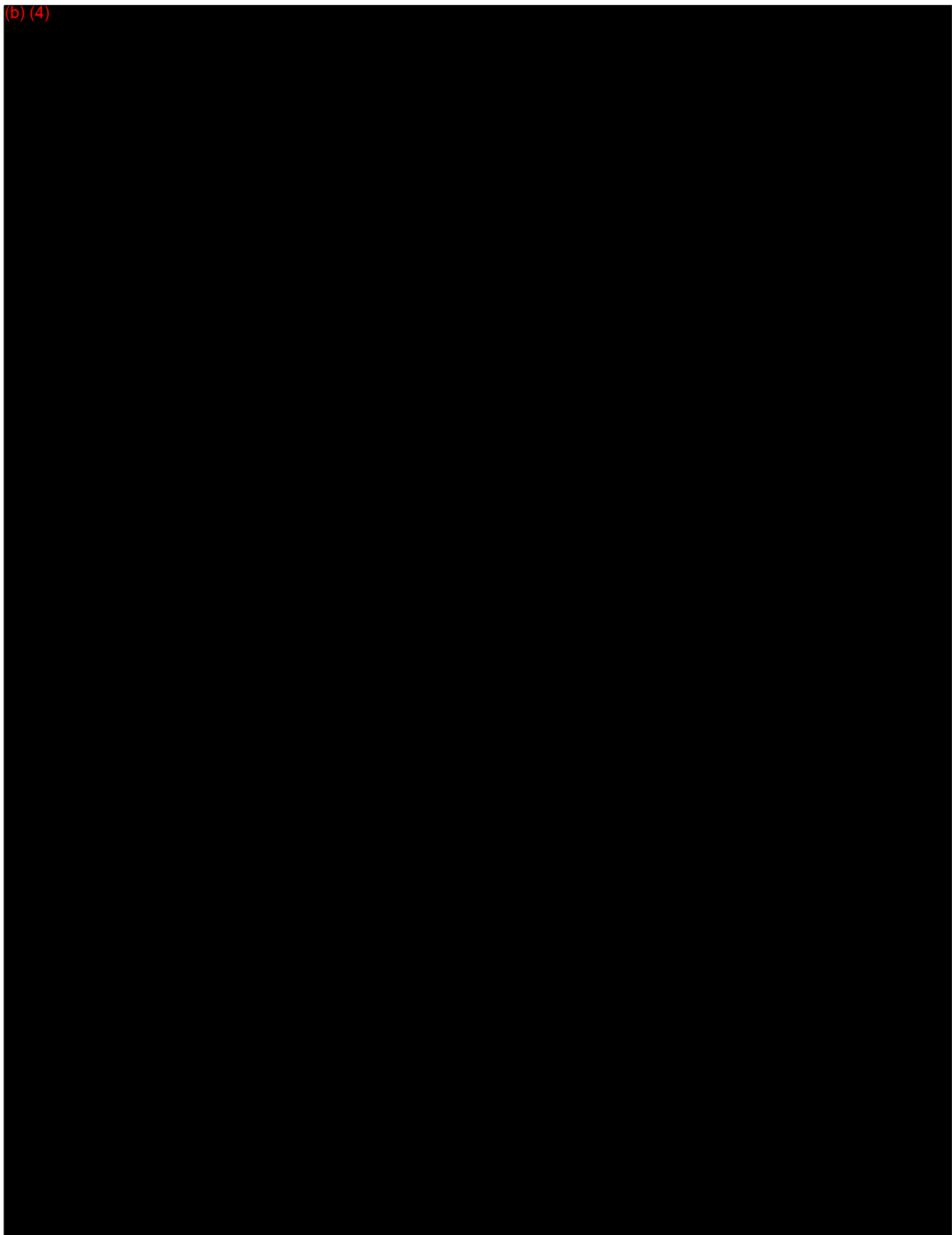
see treatment & handling protocol



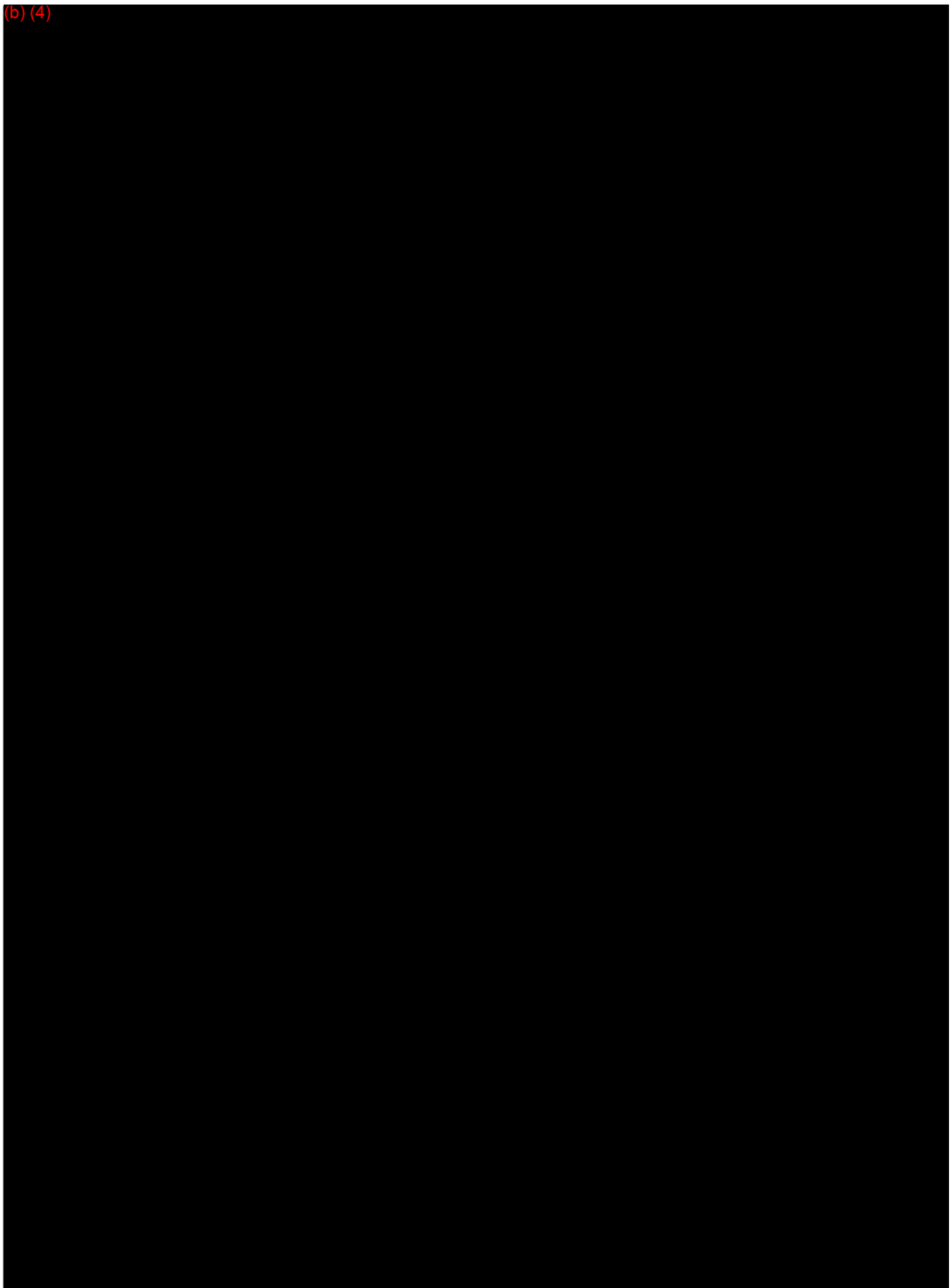
*One example*  
**Material Safety Data Sheet**

(b) (4)

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(b) (4)



\*\*\* END OF MSDS \*\*\*

AF 2938 AT&T  
~~AF~~ Chemical Corporation

72

T-35

8-4-09

797 B



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date **10/30/2008**

Dear **Dan Stinson**

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** HOU-2938

**Expiration Date** 8/21/2010

**Generator:** AT&T

**Address:** 1121 Capitol  
Houston, TX 77002

### **Waste Information**

**Name of Waste:** Recyclable diesel and water mixture

**TCEQ Waste Code #:** Recycle

**Container Type:**

**Detailed Description of Process Generating Waste:**

diesel and water from cleaning out an underground storage tank last containing diesel

**Color:** varies

**Odor:** hydrocarbon

**pH:** neutral

**Physical State:**

**Incompatibilities:** oxidizers

**Safety Related Data/Special Handling:**

level D PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.



☐ CES Environmental Services – Houston Facility  
4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☐ CES Environmental Services – Port Arthur Facility  
2420 S. Gulfway Drive, Port Arthur, TX 77641  
Phone: (713) 676-1460 Fax: (713) 676-1676  
U.S. EPA ID No: TXR000079307 ISWR No: 88585

**SECTION 1: Material Producer Information**

Company: AT&T  
Address: 1121 Capitol  
City, State, Zip: Houston, TX 77002  
Contact: Dan Stinson Title: Agent for generator  
Phone No: 713-829-6906 Fax No: 281-331-9509  
24/hr Phone: 713-829-6906  
U.S. EPA I.D. No: Na  
State I.D. Na SIC Code:

**SECTION 2: Billing Information – ☐ Same as Above**

Company: B & K Services  
Address: PO Box 2563  
City, State, Zip: Alvin, TX 77512  
Contact: 713-829-6906 Title: Agent for Generator  
Phone No: 713-829-6906 Fax No: 281-331-9509

**SECTION 3: General Description of the Material / Product**

Name of Material / Product: Recyclable Diesel and Water Mixture

Detailed Description of Process Generating or Producing the Material / Product: Diesel and water from cleaning out an underground storage tank last containing diesel.

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: Varies

Odor: Hydrocarbon

Specific Gravity (water=1): .8-1

Density: 7-8.3 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☐ Single-phase ☒ Multi-phase

Container Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)  
Container Size: \_\_\_\_\_ 3000 \_\_\_\_\_

Frequency: ☐ Weekly ☒ Monthly ☐ Quarterly ☐ Yearly  
Number of Units (containers): 1-4  
Other: Recycle

Proper U.S. DOT Shipping Name: Recyclable Hydrocarbon and Water Mixture

Class: Na UN/NA: Na PG: Na RQ: Na

Flash Point >160	pH 4-9	N/A	N/A	Solids 0-7%
Oil&Grease >100mg/l	TOC ≤5000mg/l	Zinc Nmg/l	Copper Nmg/l	Nickel Nmg/l

#### SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	Concentration	Units
The material / product consists of the following materials	Ranges are acceptable	or %
Water	90-98	%
Diesel	2-10	%

#### SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.

Level D PPE

#### SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.

None-Generator knowledge

#### SECTION 7: Incompatibilities

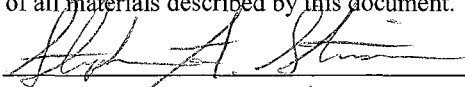
Please list all incompatibilities (if any):

Oxidizers

#### SECTION 8: Material Producer's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature:



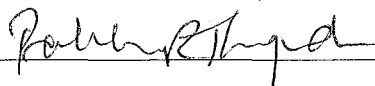
Date: 10-29-08

Printed Name/Title:

Stephen A. Stinson

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Technical Manager:



Date:

10-29-08

Approved

Rejected

Approval Number:

2938

**PROCESS FACILITY INFORMATION (CES USE ONLY!!)****1. Base Pricing (including freight):**

.15/gal up to 5% solids Solids Surcharges are standard pending customer approval first. \$250 min  
\$70/hr plus FSC

**2. Contamination Limits (maximum limit before surcharges apply):**

>5% Solids,  
<141 Flash  
Fails Chlo-d-tect

**3. Surcharge Pricing:**

Standard per customer approval

**4. Special Testing Requirements:**

Flash, Chlo-d-tect, TOC, % solids

**5. Treatment and Handling Protocol:**

Treat in used oil facility based on in-house test results

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☒ Subcategory B

☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**7. Tests for Product Recovered/Recycled (if applicable):**

Na
----

**8. Management for Product Recovered/Recycled (if applicable):**

Na
----

2922

Wilson



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/28/2008

Dear **Jesse Lopez**

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2922

**Expiration Date** 7/28/2010

**Generator:** Wilson

**Address:** 1302 Conti  
Houston, TX 77002

### Waste Information

**Name of Waste:** oil

**TCEQ Waste Code #:** Recycle

**Container Type:** tote with inner container

### **Detailed Description of Process Generating Waste:**

equipment fluid changes and unused oil, small containers packaged into a tote

**Color:** black-amber **Odor:** oil like **pH:** neutral

**Physical State:**

**Incompatibilities:** oxidizers

**Safety Related Data/Special Handling:**

level c

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

SRD  
Cannot be an emulsion.  
oil cannot be water  
soluble.



CES Environmental  
Services, Inc.

GB

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
http://www.cesenvironmental.com  
TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

**SECTION 1: Generator Information**

Company: Wilson  
Address: 1302 Conti  
City, State, Zip: Houston, TX 77002  
Contact: Jesse Lopez Title: HSE Mgr.  
Phone No: 713-237-3700 Fax No: 713-237-3422  
24/hr Phone: CES-713-417-5737  
U.S. EPA I.D. No: TXD981913817  
State I.D. 74212 SIC Code:

**SECTION 2: Billing Information - ☒ Same as Above**

Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Contact: \_\_\_\_\_ Title: \_\_\_\_\_  
Phone No: \_\_\_\_\_ Fax No: \_\_\_\_\_

**SECTION 3: General Description of the Waste**

Name of Waste: oil

Detailed Description of Process Generating Waste: Equipment Fluid Changes, and unused oil, small containers packaged into a tote

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: black-amber

Odor: oil like

Specific Gravity (water=1): .90

Density: 8 lbs/gal

Layers: ☐ Single-phase ☒ Multi-phase

Container Type: ☐ Drum ☐ Tote ☐ Truck ☒ Other (explain)  
Container Size: \_\_\_\_\_ tote with inner cont

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☒ Yearly

Texas State Waste Code No: NA-Recyclable Material

Proper U.S. DOT Shipping Name: Non-RCRA; Non-DOT Regulated Material

Class: NA UN/NA: NA PG: NA RQ: NA

Flash Point <u>&gt;140</u>	pH <u>neutral</u>	Reactive Sulfides <u>0mg/l</u>	Reactive Cyanides <u>0mg/l</u>	Solids <u>5%</u>
Oil & Grease <u>&gt;1500mg/l</u>	TOC <u>&gt;1500mg/l</u>	Zinc <u>0mg/l</u>	Copper <u>0mg/l</u>	Nickel <u>0mg/l</u>

**SECTION 4: Physical and Chemical Data**

COMPONENTS TABLE		Concentration	Units
The waste consists of the following materials		Ranges are acceptable	or %
Motor Oil used		10-20	%
motor oil unused		80-90	%
Water		0-3	%

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

Level C

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.

None-Gary Brauckman inspected the containers

**SECTION 7: Incompatibilities**

Please list all incompatibilities (if any):

oxidizers

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: ☒  
TCLP Volatiles: ☒  
TCLP Semi-Volatiles: ☒  
Reactivity: ☒  
Corrosivity: ☒  
Ignitability: ☒

**SECTION 9: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the material tested are representative of all materials described by this document.

Authorized Signature: Tyrra R. Garucci Date: 7/14/08

Printed Name/Title: Tyrra R. Garucci Facility HSE Specialist

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Pohlin

Additional Information: \_\_\_\_\_

Date: 7-28-08 Approved ☒ Rejected ☐

Approval Number: 2922

**SECTION 10: Waste Receipt Classification Under 40 CFR 437**

Is this material a wastewater or wastewater sludge? ☐ YES ☒ NO

If 'Yes', complete this section.

***PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.***

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

- (1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.
- (2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

- (3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

#### **SECTION 11: Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.



PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

\$125/Tote Trans \$70/hr + fsc

2. Contamination Limit (maximum limit before surcharges apply):

Standard per shared drive

3. Surcharge Pricing:

Standard per shared drive

4. Special Testing Requirements:

The material cannot be an emulsion.  
The oil phase cannot be water soluble.

5. Treatment and Handling Protocol:

Process to Black Oil.

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A    ☐ Subcategory B    ☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**7. Tests for Product Recovered/Recycled (if applicable):**

--

**8. Management for Product Recovered/Recycled (if applicable)**

Blackoil
----------

2924

Green Earth Fuels LLC



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/31/2008

Dear Jesse Plancarte

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2924

**Expiration Date** 7/29/2010

**Generator:** Green Earth Fuels LLC

**Address:** 550 Clinton Drive  
Galena Park, TX 77547

### Waste Information

**Name of Waste:** Water w/methanol, glycerin

**TCEQ Waste Code #:** 00081011

**Container Type:**

**Detailed Description of Process Generating Waste:**

Bio-diesel generation process

**Color:** clear

**Odor:** alcohol

**pH:** 6-9

**Physical State:**

**Incompatibilities:** oxidizers

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000767



4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

**SECTION 1: Generator Information**

Company: Green Earth Fuels of Houston LLC  
Address: 550 Clifton Dr  
City: Galena Park State: TX Zip: 77547  
Contact: Adrian Randle Title: \_\_\_\_\_  
Phone Number: 713-534-3847 Fax Number: \_\_\_\_\_  
24/hr Phone Number: \_\_\_\_\_  
US EPA ID No: TXR 0000 78091  
State ID No: 88346 SIC Code: \_\_\_\_\_

**SECTION 2: Billing Information -** ☐ Same as Above

Company: Rada Techno logics  
Address: PO Box 1147  
City: Pearland State: TX Zip: 77588  
Contact: Sease Plancarte Title: President  
Phone Number: 832-257-6128 Fax Number: 800-508-1223

**SECTION 3: General Description of the Waste**

Name of Waste: water w/ methanol, Glycerin

Detailed Description of Process Generating Waste:

Bio-diesel Generation Process

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: Clear Odor: alcohol

Specific Gravity (water=1): 0.962 Density: 7.5-8 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☒ Monthly ☐ Yearly ☐ One-Time

Quantity: 67000 gal

**Is this a USEPA “Hazardous Waste” per 40CFR 261.3?**

☐ Yes☒ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it:

☐ D001 (Ignitable)☐ D002 (Corrosive)☐ D003 (Reactive)

**Characteristic for Toxic Metals:**

☐ D004

☐ D005

☐ D006

☐ D007

☐ D008☐ D009

☐ D010

☐ D011

**Characteristic for Toxic Organics: D012 thru D043** (please list all that apply)

**Is this an "F" or "K" Listed waste or mixed with one?**

☐ Yes☐ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☐ No

☐ Yes☐ No

If "Yes", then please list ALL applicable codes:

**Texas State Waste Code Number:**

20081011

**Proper US DOT Shipping Name:**

Class: N/A UN/NA:

Non RCRA/Non DOT Regulated Material (Alcohol Exemption)

110

**PG :**

**RQ:**

1112

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
120		6-9		N/A mg/l		N/A mg/l		<1 %	
Oil & Grease		TOC		Zinc		Copper		Nickel	
>1500 mg/l		60-70000 mg/l		1-2 mg/l		0-1 mg/l		0-3 mg/l	

#### **SECTION 4:** Physical and Chemical Data

[illegible]

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.

CES Analytical

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

Oxidizers

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	<u>X</u>
TCLP Volatiles:	<u>X</u>
TCLP Semi-Volatiles:	<u>X</u>
Reactivity:	<u>X</u>
Corrosivity:	<u>X</u>
Ignitability:	<u>X</u>

**SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)**

Is this material a wastewater or wastewater sludge?  
If 'Yes', complete this section.

☒ YES ☐ NO

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.**

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory : Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☒ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

- (1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.
- (2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.
- Cadmium: 0.2 mg/L
  - Chromium: 8.9 mg/L
  - Copper: 4.9 mg/L
  - Nickel: 37.5 mg/L
- (3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.
- ☐ Metals Subcategory
  - ☐ Oils Subcategory
  - ☐ Organics Subcategory

**SECTION 10 Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

**SECTION 11: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Printed Name/Title: \_\_\_\_\_

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Compliance Officer: _____	
Date: 7-29-08	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Rejected
Approval Number: 2924	

1. **Base Pricing (including freight):**

\$ 0.30 / gal

2. **Contamination Limits (maximum limit before surcharges apply):**

alcohol must be less than 24%. Correlate to s.g. If % alcohol exceeds 24%, contact sales as app.

3. **Surcharge Pricing:**

~~charge up to~~  
\$ 0.01 / gal per % solids in excess of 1%

4. **Special Testing Requirements:**

s.g., TOC, metals, phenol, % oil

5. **Treatment and Handling Protocol:**

Send to heat tank it back to remove oil.  
Take Process water phase to Process 1.

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☐ Subcategory B

☒ Subcategory C

7. **Tests for Product Recovered/Recycled (if applicable):**

--

8. **Management for Product Recovered/Recycled (if applicable):**

--



4904 Griggs Road  
Houston, TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1676

To: Joy Baker  
Cc: Matt bowman, Gary Peterson, Prabhaker,  
Matt Moser, Joe Camp  
From: Miles Root

Date: 07/28/08

Lab Memo: 08-136

Subject: **Rada Technologies Evaluation 0708-43**

A sample of waste water from Rada Technologies has been evaluated for potential processing at CES. This sample is evaluation 0708-43 and is waste water from a biodiesel plant. Overall, this material is high in TOC, but otherwise can be processed with special handling if the material arrives with an oil layer.

This sample represents approximately 60,000 gallons of material. The material is stated to have less than 24% methanol, which means we can move it to System 1, if needed, using the alcohol exemption. It has a flash point between 90 and 95 deg F. The test sample had a 2% by volume oil layer and smells like vegetable oil. This oil blends with our black oil. If this material arrives with an oil layer the water can be drained from the bottom of the trailer and the oil sent to the back for processing. At 2%, this would only be 100 gallons in a 5000 gallon load.

When the oil layer is removed and the water treated, very fine solids are produced which are slow to settle out. Once settled, the water is high in TOC at 68,350 ppm. Metals are acceptable and there are no phenols. This material can be processed at CES with charges to cover the excessively high TOC. Moving the material to System 1 is also an option, depending upon pricing. Since Operations will be processing this material they need to have input into treating the material at CES or moving to System 1 for final disposition. The table below summarizes the analytical testing.

Rada Technologies	
Evaluation 0708-43	
Neat Sample	
Flash point, deg F	90-95
Treatability	OK
Solids, vol%	0
Oils, vol%	2
pH	6
Treated Sample	
TOC, ppm	68350
Phenols, ppm	0
Metals	
Cd	0.013
Cr	0.408
Cu	0.282
Ni	1.864
Zn	1.774

2923

Quality Valve and Machine  
Works



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/28/2008

Dear **Zac or Dave**

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2923

**Expiration Date** 7/28/2010

**Generator:** Quality Valve and Machine Works

**Address:** 233 East FM 2821  
Huntsville, TX 77320

### Waste Information

**Name of Waste:** Dirt contaminated with hydrocarbons

**TCEQ Waste Code #:** CESQ4091

**Container Type:** cy bos

**Detailed Description of Process Generating Waste:**

clean up

**Color:** dark

**Odor:** none

**pH:** neutral

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000776



4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676

<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

### SECTION 1: Generator Information

Company: QUALITY VALVE  
Address: 233 EAST FM 2821  
City: HUNTSVILLE State: TX Zip: 77320  
Contact: ZAC MCKAUGHAN Title: \_\_\_\_\_  
Phone Number: 2815414829 Fax Number: \_\_\_\_\_  
24/hr Phone Number: 281-541-4829  
US EPA ID No: TXCESQG  
State ID No: CESQG SIC Code: \_\_\_\_\_

### SECTION 2: Billing Information - ☐ Same as Above

Company: CKG SERVICES  
Address: 10707 HONEA EGYPT ROAD  
City: MONTGOMERY State: TX Zip: 77316  
Contact: ZAC MCKAUGHAN Title: PRESIDENT  
Phone Number: 936-483-3662 Fax Number: 936-756-1226

### SECTION 3: General Description of the Waste

Name of Waste: DIRT CONTAMINATED WITH HYDROCARBONS  
Detailed Description of Process Generating Waste: CLEAN UP

Physical State: ☐ Liquid ☐ Sludge ☐ Powder  
☒ Solid ☐ Filter Cake ☐ Combination

Color: DARK Odor: NONE

Specific Gravity (water=1): NA Density: NA lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☐ Truck ☒ Other (explain)

Frequency: ☐ Weekly ☒ Monthly ☐ Yearly ☐ One-Time

Quantity: CUBIC YARD BOXES 16

EPAHO106000777

**Is this a USEPA "Hazardous Waste" per 40CFR 261.3?**

☐ Yes ☒ No

**If "Yes", then please fill out the UHC Form**

If "Yes", Is It: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)  
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009  
☐ D010 ☐ D011

**Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)**

**Is this an "F" or "K" Listed waste or mixed with one?**

☐ Yes ☒ No

**If "Yes", then please list ALL applicable codes:**

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No

☐ Yes ☒ No

**If "Yes", then please list ALL applicable codes:**

**Texas State Waste Code Number:**

CESQ 4091

**Proper US DOT Shipping Name:**

NON REGULATED/NON DOT/NON HAZ

**Class:** NA **UN/NA:**

NA

PG :

NA

**RQ:**

NA

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
NA		NA <i>water</i>		NA <u>mg/l</u>		NA <u>mg/l</u>		NA <u>100</u> %	
Oil & Grease		TOC		Zinc		Copper		Nickel	
71500 NA	<u>mg/l</u>	NA	<u>mg/l</u>	NA	<u>mg/l</u>	NA	<u>mg/l</u>	NA	<u>mg/l</u>

#### SECTION 4: Physical and Chemical Data

[illegible]

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

NONE

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. ANALYTICAL

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

None Known

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	0
TCLP Volatiles:	0
TCLP Semi-Volatiles:	0
Reactivity:	0
Corrosivity:	0
Ignitability:	0

**SECTION 9: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_

Date: 7/23/2008

Printed Name/Title: ZAC MCKAUGHAN / PRESIDENT

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: *Robert Gray*

Date: 7-28-08

☒ Approved

☐ Rejected

Approval Number: 2923



## NORTH WATER DISTRICT LABORATORY SERVICES, INC.

8725 Fawn Trail • The Woodlands, Texas 77385  
(936)321-6060 • fax (936)321-6061 • email: lab@nwdls.com

CLIENT: CKG Services  
10707 Honea Egypt Rd  
Montgomery, Texas 77316  
Zac McKausha

## Test Report

FACILITY NAME: Quality Valve  
SAMPLE ID: Cub Yrd Box 1  
SAMPLE TYPE: Grab  
SAMPLE MATRIX: Solid  
SAMPLED BY: EF

DATE SAMPLED: 07/07/08  
TIME SAMPLED: 1145  
DATE RECEIVED: 07/07/08  
LAB FILE ID: 7228006

All Tests were Performed in Accordance with:

"Test Methods for Evaluating Solid Waste", SW-846, Third Edition, 1995.

Code of Federal Regulations, 40 CFR (7/1/95 Edition), Ch. 1, Pt. 261, App. 2, Method 1311.

*Mending Holme for*  
Derek McCoy  
Derek McCoy  
Technical Director

*Spoke to zac. He said this box  
is going to TICO.  
Disregard this analytical for  
profiling purpose.*

going to  
TICO

FACILITY NAME: Quality Valve  
SAMPLE ID: Cub Yrd Box 1  
SAMPLE TYPE: Grab  
SAMPLE MATRIX: Solid  
SAMPLED BY: BF

DATE SAMPLED: 07/07/08  
TIME SAMPLED: 1145  
DATE RECEIVED: 07/07/08  
LAB FILE ID: 7228006

					MS - Matrix Spike	MSD - Matrix Spike Dup		
TCLP METALS	RESULT mg/L	LIMIT mg/L	EPA Method	Analyst's Initials	Date of Analysis	Blank mg/L	Duplicates mg/L	Spike % Recovery
Arsenic	0.060	5.0	200.7	JL	07/21/08	< 0.01	<0.01/<0.01	114.0
Barium	2.14	100	200.7	JL	07/21/08	< 0.01	.034/.035	102.0
Cadmium	0.080	1.0	200.7	JL	07/21/08	< 0.01	<0.01/<0.01	113.0
Chromium	< 0.01	5.0	200.7	JL	07/21/08	< 0.01	<0.01/<0.01	115.0
Lead	< 0.01	5.0	200.7	JL	07/21/08	< 0.01	<0.01/<0.01	116.0
Mercury	< 0.001	0.2	245.1	JL	07/21/08	< 0.001	<0.001/<0.00	80.0
Selenium	0.08	1.0	200.7	JL	07/21/08	< 0.01	.042/.019	113.0
Silver	< 0.01	5.0	200.7	JL	07/21/08	< 0.01	<0.01/<0.01	99.8
TCLP SEMI-VOLATILES	RESULT mg/L	LIMIT mg/L	EPA Method	Analyst's Initials	Date of Analysis	Blank mg/L	MS % Recovery	MSD % Recovery
Pyridine	< 0.05	5.0	8270	JM	07/22/08	< 0.05	44.8	44.4
O-Cresol	< 0.05	200	8270	JM	07/22/08	< 0.05	57.4	57.2
M,P-Cresol	< 0.01	200	8270	JM	07/22/08	< 0.05	36.3	55.7
Hexachloroethane	< 0.01	3.0	8270	JM	07/22/08	< 0.01	55.9	55.7
Nitrobenzene	< 0.01	2.0	8270	JM	07/22/08	< 0.01	57.1	56.2
Hexachlorobutadiene	< 0.01	0.5	8270	JM	07/22/08	< 0.01	53.2	53.3
2,4,5-Trichlorophenol	< 0.02	400	8270	JM	07/22/08	< 0.02	67.2	66.6
2,4,6-Trichlorophenol	< 0.02	2.0	8270	JM	07/22/08	< 0.02	67.2	66.6
2,4-Dinitrotoluene	< 0.01	0.13	8270	JM	07/22/08	< 0.01	50.1	49.9
Hexachlorobenzene	< 0.01	0.13	8270	JM	07/22/08	< 0.01	69.4	69.5
Pentachlorophenol	< 0.05	100	8270	JM	07/22/08	< 0.05	88.9	83.9
TCLP VOLATILES								
Vinyl Chloride	< 0.10	0.2	8260	JM	07/21/08	< 0.01	104.5	103.8
1,1-Dichloroethylene	< 0.10	0.7	8260	JM	07/21/08	< 0.01	115.2	113.7
Methyl Ethyl Ketone	917	200	8260	JM	07/21/08	< 0.01	95.4	77.6
Chloroform	< 0.10	6.0	8260	JM	07/21/08	< 0.01	116.6	110.5
1,2-Dichloroethane	< 0.10	0.5	8260	JM	07/21/08	< 0.01	101.5	92.2
Benzene	< 0.10	0.5	8260	JM	07/21/08	< 0.01	113.7	109.4
Carbon Tetrachloride	< 0.10	0.5	8260	JM	07/21/08	< 0.01	111.7	108.3
Trichloroethylene	< 0.10	0.5	8260	JM	07/21/08	< 0.01	120.9	115.5
Tetrachloroethylene	< 0.10	0.7	8260	JM	07/21/08	< 0.01	118.9	113.9
Chlorobenzene	< 0.10	100	8260	JM	07/21/08	< 0.01	114.0	111.5
1,4-Dichlorobenzene	< 0.10	7.5	8260	JM	07/21/08	< 0.01	113.3	113.4

**NORTH WATER DISTRICT LABORATORY SERVICES, INC.**

8725 Fawn Trail • The Woodlands, Texas 77385  
(936)321-6060 • fax (936)321-6061 • email: lab@nwdls.com

CLIENT: CKG Services  
10707 Honea Egypt Rd  
Montgomery, Texas 77316  
Zac McKausha

**Test Report**

FACILITY NAME: Quality Valve  
SAMPLE ID: Cub Yrd Box 2  
SAMPLE TYPE: Grab  
SAMPLE MATRIX: Solid  
SAMPLED BY: EF

DATE SAMPLED: 07/07/08  
TIME SAMPLED: 1200  
DATE RECEIVED: 07/07/08  
LAB FILE ID: 7228007

All Tests were Performed in Accordance with:

"Test Methods for Evaluating Solid Waste", SW-846, Third Edition, 1995.

Code of Federal Regulations, 40 CFR (7/1/95 Edition), Ch. 1, Pt. 261, App. 2, Method 1311.

*Sherry Holme for*  
*Derek McCoy*  
Derek McCoy  
Technical Director

FACILITY NAME: Quality Valve  
 SAMPLE ID: Cub Yrd Box 2  
 SAMPLE TYPE: Grab  
 SAMPLE MATRIX: Solid  
 SAMPLED BY: EF

DATE SAMPLED: 07/07/08  
 TIME SAMPLED: 1200  
 DATE RECEIVED: 07/07/08  
 LAB FILE ID: 7228007

MS - Matrix Spike MSD - Matrix Spike Dup

TCLP METALS	RESULT mg/L	LIMIT mg/L	EPA Method	Analysts Initials	Date of Analysis	Blank mg/L	Duplicate mg/L	Spike % Recovery
Arsenic	0.011	5.0	200.7	JL	07/21/08	< 0.01	< 0.01 / < 0.01	114.0
Barium	3.96	100	200.7	JL	07/21/08	< 0.01	.054 / .035	102.0
Cadmium	< 0.01	1.0	200.7	JL	07/21/08	< 0.01	< 0.01 / < 0.01	113.0
Chromium	0.019	5.0	200.7	JL	07/21/08	< 0.01	< 0.01 / < 0.01	115.0
Lead	0.07	5.0	200.7	JL	07/21/08	< 0.01	< 0.01 / < 0.01	116.0
Mercury	< 0.001	0.2	245.1	JL	07/21/08	< 0.001	< 0.001 / < 0.001	80.0
Selenium	0.03	1.0	200.7	JL	07/21/08	< 0.01	.042 / .019	113.0
Silver	< 0.01	5.0	200.7	JL	07/21/08	< 0.01	< 0.01 / < 0.01	99.8
TCLP SEMI-VOLATILES	RESULT mg/L	LIMIT mg/L	EPA Method	Analysts Initials	Date of Analysis	Blank mg/L	MS % Recovery	MSD % Recovery
Pyridine	< 0.05	5.0	8270	JM	07/22/08	< 0.05	44.8	44.4
O-Cresol	< 0.05	200	8270	JM	07/22/08	< 0.05	57.4	57.2
M,P-Cresol	< 0.01	200	8270	JM	07/22/08	< 0.05	56.3	55.7
Hexachloroethane	< 0.01	3.0	8270	JM	07/22/08	< 0.01	55.9	55.7
Nitrobenzene	< 0.01	2.0	8270	JM	07/22/08	< 0.01	57.1	56.2
Hexachlorobutadiene	< 0.01	0.5	8270	JM	07/22/08	< 0.01	53.2	53.3
2,4,5-Trichlorophenol	< 0.02	400	8270	JM	07/22/08	< 0.02	67.2	66.6
2,4,6-Trichlorophenol	< 0.02	2.0	8270	JM	07/22/08	< 0.02	67.2	66.6
2,4-Dinitrotoluene	< 0.01	0.13	8270	JM	07/22/08	< 0.01	50.1	49.9
Hexachlorobenzene	< 0.01	0.13	8270	JM	07/22/08	< 0.01	69.4	69.5
Pentachlorophenol	< 0.05	100	8270	JM	07/22/08	< 0.05	88.9	83.9
TCLP VOLATILES								
Vinyl Chloride	< 0.10	0.2	8260	JM	07/21/08	< 0.01	104.5	103.8
1,1-Dichloroethylene	< 0.10	0.7	8260	JM	07/21/08	< 0.01	115.2	113.7
Methyl Ethyl Ketone	< 0.10	200	8260	JM	07/21/08	< 0.01	95.4	77.6
Chloroform	< 0.10	6.0	8260	JM	07/21/08	< 0.01	116.6	110.5
1,2-Dichloroethane	< 0.10	0.5	8260	JM	07/21/08	< 0.01	101.5	92.2
Benzene	< 0.10	0.5	8260	JM	07/21/08	< 0.01	113.7	109.4
Carbon Tetrachloride	< 0.10	0.5	8260	JM	07/21/08	< 0.01	111.7	108.3
Trichloroethylene	< 0.10	0.5	8260	JM	07/21/08	< 0.01	120.9	115.5
Tetrachloroethylene	< 0.10	0.7	8260	JM	07/21/08	< 0.01	118.9	113.9
Chlorobenzene	< 0.10	100	8260	JM	07/21/08	< 0.01	114.0	111.5
1,4-Dichlorobenzene	< 0.10	7.5	8260	JM	07/21/08	< 0.01	113.3	113.4

**NWDLS** North Water District  
Laboratory Services, Inc.  
8725 Town Trail - The Woodlands, TX 77385  
(936) 321-6060 - Fax (936) 321-6061 - lab@nwdls.com

**Test Report**  
CKG Services - CKG Services  
10707 Honey Egypt Rd Montgomery, TX 77316  
Sample Date: 07/07/2008

Report #137767

Report Generated  
07/22/2008 14:39

Site: 102511 1000

Page 1 of 1

## Unknown Collection Point - Grab

Sample Time	C	Received Lab	OD mg/L	TPH mg/L
07/07 11:45 DUK Box 1	EF	07/07 12:55		<10 07/07 02:00 DL
07/07 12:00 DUK Box 2	EF	07/07 12:55		<10 07/07 04:00 DL
07/07 13:30 DUK Box 1	EF	07/07 15:08	3156 07/07 16:00 DL	

All analysis started within the time frame specified in "Standard Methods for the Examination of Water and Wastes", 20th Edition, 1998, or EPA "Methods for Chemical Analysis of Water and Wastes".  
Analyst, date and time of analysis is shown below result. Methods stated below come from "Standard Methods for the Examination of Water and Wastewater", 20th Edition, 1998, or EPA Methodology.  
COD: High 8000 RL 10 TPH: CEC 1005 RL 10



North Water District  
Laboratory Services, Inc.

8725 Fawn Trail - The Woodlands, TX 77385  
(936) 321-6960 - fax (936) 321-6061 - lab@nwdls.com

## QA Test Report

CKG Services - CKG Services  
10707 Honea Egypt Rd Montgomery, TX 77519

Sample Date: 07/07/2008

Report #137747

Report Generated  
07/22/2008 14:39

Site: 102511 1000

Page 1 of 1

## Unknown Collection Point - Grab

Sample Time	C	Received Lab	Duplicate COD mg/L	Spike COD mg/L	Standard COD mg/L	Blank COD mg/L	Spike TPH mg/L	Standard TPH mg/L	Blank TPH mg/L
07/07 11:55 Cubic 1	EF	07/07 12:55					420/400 07/22 09:00 JL	350/400 07/22 09:00 JL	<10 07/22 09:00 JL
07/07 11:57 Cubic 2	EF	07/07 12:55					420/400 07/22 09:00 JL	350/400 07/22 09:00 JL	<10 07/22 09:00 JL
07/07 12:38 Wing 06 0507	EF	07/07 16:06	20/23 07/08 10:00 00	401/500 07/08 10:00 00	889/1000 07/08 10:00 00	<10 07/08 10:00 00			

Analysis	Reporting Limit	Analysis	Reporting Limit
COD (Hach 8000)	10 mg/L	TPH (TEQ 1005)	10 mg/L

All analysis started within the time frame specified in "Standard Methods for the Examination of Water and Wastes", 20th Edition, 1998, or EPA "Methods for Chemical Analysis of Water and Wastes".  
Analyst, date and time of analysis is shown below result. QA/QC is for the group of ten samples.  
Methods stated below come from "Standard Methods for the Examination of Water and Wastewater", 20th Edition, 1998, or EPA Methodology.  
Methods: COD: Hach 8000 TPH: TEQ 1005



**North Water District  
Laboratory Services, Inc.**

8725 Fawn Trail • The Woodlands, TX 77385  
(936) 321-6060 • fax (936) 321-6061 • [lab@newdl.com](mailto:lab@newdl.com)

## ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Company Name: CKG Services  
Contact: Zoe McKenaghan  
Address: 10707 Horizon Supt Rd  
Montgomery TX 77016  
Phone #: 936-483-3662 Fax #: 936-756-1228  
P.O. #:

Project Name: Quality Valve - Huntsville TX  
Project Location: Huntsville TX

[illegible]

281-541-4829

2911

Quest Chemical Corporation



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-4460

## **Waste Pre-Acceptance/Approval Letter**

Date **8/4/2008**

Dear **Tom Culp**

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2911

**Expiration Date** 8/4/2010

**Generator:** Quest Chemical Corporation

**Address:** 12255 FM 529  
Houston, TX 77041

### **Waste Information**

**Name of Waste:** Wastewater (alcohol exemption)

**TCEQ Waste Code #:** 00031021

**Container Type:**

**Detailed Description of Process Generating Waste:**

Rinsing of pots and kettles from manufacturing soaps

**Color:** varies

**Odor:** mild

**pH:** 5-10

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000789

From:

08/04/2008 13:52 #225 P.002/005



4904 Griggs Road, Houston, TX 77021  
 Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 3090C

**SECTION 1: Generator Information**

Company: Quest Chemical Corporation  
 Address: 12255 FM 529  
 City: Houston State: TX Zip: 77041  
 Contact: Tom Culp Title: Vice President  
 Phone Number: 713-896-8188 Fax Number: 713-869-8644  
 24/hr Phone Number: 713-896-8188  
 US EPA ID No: TXD982758939  
 State ID No: 74760 SIC Code: NA

**SECTION 2: Billing Information - ☒ Same as Above**

Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Contact: \_\_\_\_\_ Title: \_\_\_\_\_  
 Phone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_

**SECTION 3: General Description of the Waste**

Name of Waste: Wastewater (alcohol exemption)  
 Detailed Description of Process Generating Waste:

rinsing of pots and kettles from manufacturing soaps

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: varies Odor: mild

Specific Gravity (water=1): 1 Density: 8.34 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☒ Monthly ☐ Yearly ☐ One-Time

Quantity: 1

EPAHO106000790

08/04/2008 13:53 #225 P.003/005

☐ Yes ☒ No

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)  
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009  
☐ D010 ☐ D011

☐ Yes ☒ No

If "Yes", then please list ALL applicable codes:

31021

Non RCRA Non DOT Regulated rinse water per 49 CFR

**Class:** na **UN/NA:** na **PG :** na **RQ:** na

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
<140		5-10		<20 <u>mg/l</u>		<20 <u>mg/l</u>		0-2 <u>%</u>	
Oil & Grease		TOC		Zinc		Copper		Nickel	
>1500	<u>mg/l</u>	NA	<u>mg/l</u>	NA	<u>mg/l</u>	NA	<u>mg/l</u>	NA	<u>mg/l</u>

#### SECTION 4: Physical and Chemical Data

[illegible]

EPAHQ106000791

From:

08/04/2008 13:53 #225 P.004/005

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

Standard

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

None Known

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:

X

TCLP Volatiles:

X

TCLP Semi-Volatiles:

X

Reactivity:

X

Corrosivity:

X

Ignitability:

X

**SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)**

Is this material a wastewater or wastewater sludge?

☒ YES

☐ NO

If 'Yes', complete this section.

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.**

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

From:

08/04/2008 13:53 #225 P.005/005

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☒ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☒ Organics Subcategory

**SECTION 10 Additional Instructions**

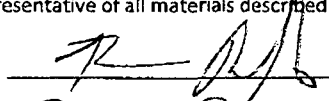
If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

**SECTION 11: Generator's Certification**

The information contained herein is based on ☐ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature:

  
Bruce Riffel

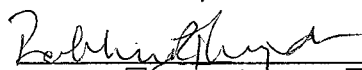
Date:

8-4-08

Printed Name/Title:

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer:



Date: 8-4-08

☒ Approved

☐ Rejected

Approval Number:

2911



## PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

### 1. Base Pricing (including freight):

Freight - \$280.00/load plus fsc and demurrage after 1 hour loading; Disposal -\$0.27/gallon

### 2. Contamination Limit (maximum limit before surcharges apply):

Solids - 2%

### 3. Surcharge Pricing:

Solids - \$0.01/gallon/% greater than 2 %

### 4. Special Testing Requirements:

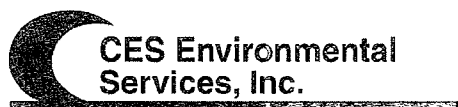
① Test for flash point, if the flash point is greater than 140°F run the other WATS tests, PCB panel, metals to process to CES.  
② Test for pH

### 5. Treatment and Handling Protocol:

Process in System 1

### 6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A    ☐ Subcategory B    ☒ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**7. Tests for Product Recovered/Recycled (if applicable):**

NA
----

**8. Management for Product Recovered/Recycled (if applicable)**

NA
----

2913

Kinder Morgan - Pasadena Jefferson



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 8/8/2008

Dear Lance Wiley

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2913

**Expiration Date** 8/8/2010

**Generator:** Kinder Morgan - Pasadena Jefferson

**Address:** 400 N. Jefferson  
Pasadena, TX 77506

### Waste Information

**Name of Waste:** broken glass

**TCEQ Waste Code #:** 00043882

**Container Type:**

**Detailed Description of Process Generating Waste:**

broken glass jars

**Color:** varies

**Odor:** none

**pH:** na

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**

PPE-leather gloves, face shield, goggles

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

SW  
JR

4904 Griggs Road, Houston, TX 77021

Phone: (713) 676-1460 Fax: (713) 676-1676

<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

**SECTION 1: Generator Information**

Company: Kinder Morgan  
Address: 400 N. Jefferson  
City: Pasadena State: TX Zip: 77506  
Contact: Lance Wiley Title: \_\_\_\_\_  
Phone Number: 713-724-4912 Fax Number: \_\_\_\_\_  
24/hr Phone Number: \_\_\_\_\_  
US EPA ID No: TXR0000012061  
State ID No: \_\_\_\_\_ SIC Code: 83594

**SECTION 2: Billing Information -** ☒ Same as Above

Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Contact: \_\_\_\_\_ Title: \_\_\_\_\_  
Phone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_

**SECTION 3: General Description of the Waste**

Name of Waste: Broken Glass  
Detailed Description of Process Generating Waste: \_\_\_\_\_

Broken glass jars

Physical State: ☐ Liquid ☐ Sludge ☐ Powder  
☒ Solid ☐ Filter Cake ☐ Combination

Color: varies Odor: none

Specific Gravity (water=1): \_\_\_\_\_ Density: \_\_\_\_\_ lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☐ Yearly ☐ One-Time

Quantity: 10

**Is this a USEPA "Hazardous Waste" per 40CFR 261.3?**

☐ Yes ☒ No

**If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto**

**If "Yes", is it:**

☐ D001 (Ignitable)☐ D002 (Corrosive)☐ D003 (Reactive)

**Characteristic for Toxic Metals:**

☐ D004

☐ P005

☐ D006

☐ D007

**D008**

D009

☐ 0010

☐ 0011

**Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)**

**Is this an "F" or "K" Listed waste or mixed with one?**

☐ Yes ☒ No

**If "Yes", then please list ALL applicable codes:**

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No

☐ Yes☒ No

**If "Yes", then please list ALL applicable codes:**

**Texas State Waste Code Number:**

0043882

**Proper US DOT Shipping Name:**

Non-Hazardous, Non-Regulated Solid

**Class:**

UN/NA:

**PG :**

**RO:**

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
N/A		N/A		N/A mg/l		N/A mg/l		100	%
Oil & Grease		TOC		Zinc		Copper		Nickel	
N/A	mg/l	BRL	mg/l	BRL	mg/l	BRL	mg/l	BRL	mg/l

#### SECTION 4: Physical and Chemical Data

[illegible]

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

PPE - Leather gloves, face shield / goggles

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

**SECTION 8: Generator's Knowledge Documentation**Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCCLP Metals: BRL

TCCLP Volatiles: BRL

TCCLP Semi-Volatiles: BRL

Reactivity: Non-Reactive

Corrosivity: Non-Corrosive

Ignitability: Non-Ignitable

**SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)**

Is this material a wastewater or wastewater sludge?

☐ YES☒ NO

If 'Yes', complete this section.

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.****Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

**SECTION 10: Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

**SECTION 11: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Printed Name/Title: \_\_\_\_\_

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: \_\_\_\_\_

Date: \_\_\_\_\_

Approval Number: \_\_\_\_\_

☒ Approved

☐ Rejected



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**1. Base Pricing (including freight):**

\$35/DM

**2. Contamination Limit (maximum limit before surcharges apply):**

**3. Surcharge Pricing:**

**4. Special Testing Requirements:**

**5. Treatment and Handling Protocol:**

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A    ☐ Subcategory B    ☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**7. Tests for Product Recovered/Recycled (if applicable):**

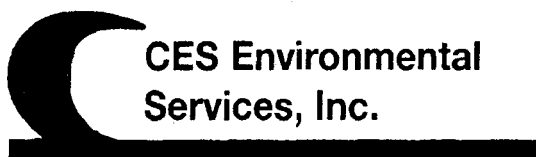
--

**8. Management for Product Recovered/Recycled (if applicable)**

--

2915

Thermal Energy Corp. -- ~~Braes~~



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 8/12/2008

Dear **Zac or Dave**

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2915

**Expiration Date** 8/12/2010

**Generator:** Thermal Energy Corporation - Braeswood

**Address:** 1615 Braeswood  
Houston, TX

### Waste Information

**Name of Waste:** Dirt from caustic leak

**TCEQ Waste Code #:** CESQ3191

**Container Type:**

**Detailed Description of Process Generating Waste:**

Clean up from caustic leak, dirt, grass and mineral wool insulation, majority is dirt.

**Color:** dark

**Odor:** none

**pH:** na

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**

na

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

Handwritten: *Don't GPO*  
*There cannot be any free liquids.*



4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676

<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

### SECTION 1: Generator Information

Company: THERMAL ENERGY CO.  
Address: 1615 BRAESWOOD  
City: HOUSTON State: TX Zip: 77030  
Contact: CHARLIE MICHALAK Title:  
Phone Number: 7137916700 Fax Number: 7137916711  
24/hr Phone Number: 2815414829  
US EPA ID No: 988006453  
State ID No: CESQG SIC Code:

### SECTION 2: Billing Information - ☐ Same as Above

Company: CKG SERVICES, LLC  
Address: 10707 HONEA EGYPT ROAD  
City: MONTGOMERY State: TX Zip: 77316  
Contact: ZAC MCKAUGHAN Title: PRESIDENT  
Phone Number: 281-641-4829 Fax Number: 936-756-1226

### SECTION 3: General Description of the Waste

Name of Waste: DIRT FROM CAUSTIC LEAK  
Detailed Description of Process Generating Waste: CLEAN UP FROM CAUSTIC LEAK, DIRT, GRASS AND MINERAL WOOL INSULATION, MAJORITY IS DIRT.

Physical State: ☐ Liquid ☐ Sludge ☐ Powder  
☒ Solid ☐ Filter Cake ☐ Combination

Color: DARK Odor: NONE

Specific Gravity (water=1): NA Density: NA lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☐ Yearly ☒ One-Time

Quantity: 2 55GALLON

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☒ No

If "Yes", then please fill out the UHC Form



**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

None Known

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	0
TCLP Volatiles:	0
TCLP Semi-Volatiles:	0
Reactivity:	0
Corrosivity:	0
Ignitability:	0

**SECTION 9: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_

Date: 7-28-08

Printed Name/Title: EARL MCKAY

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Robert Chang

Date: 8-12-08

☒ Approved

☐ Rejected

Approval Number: 2915

**SECTION 10: Waste Receipt Classification Under 40 CFR 437**

Is this material a wastewater or wastewater sludge?

If 'Yes', complete this section.

☐ YES ☐ NO

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.**

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes

# Material Safety Data Sheet

Provided by:

DPC Industries, Inc. DX Distributors, Inc.  
DPC Enterprises DX Systems Company  
DXI Industries, Inc. DX Terminals

PO Box 24600  
Houston, Tx 77229-4600  
281-457-4888  
www.dxgroup.com

## SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name** CAUSTIC SODA LIQUID (ALL GRADES)  
**Synonyms** SODIUM HYDROXIDE SOLUTION  
**Chemical Name** CAUSTIC SODA LIQUID

**Emergency phone:** 281-457-4888  
**Chemtrec:** 800-424-9300

**Date of Issue:** 10/01/00  
**Revised Date:** N/A

## SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENTS	PERCENT	CAS NO.
SODIUM HYDROXIDE	10% - 52%	1310-73-2
SODIUM CARBONATE	<0.2	497-19-8
SODIUM CHLORIDE	<1.0	7647-14-5
WATER	BALANCE	7732-18-5

## SECTION 3 - HAZARDS IDENTIFICATION

### Potential Health Effects

**ACGIH - TLV:** 2 mg/cu. M

**Eye Contact** CONTACT MAY CAUSE SEVERE DAMAGE INCLUDING BURNS AND BLINDNESS.

**Skin Contact** CONTACT CAUSES SEVERE SKIN IRRITATION AND POSSIBLE BURNS.

**Ingestion** CORROSIVE AND MAY CAUSE SEVERE AND PERMANENT DAMAGE TO MOUTH, THROAT AND STOMACH.

**Inhalation** EXPOSURE TO VAPOR, MIST, OR LIQUID CAN PRODUCE BURNS OF THE RESPIRATORY TRACT.

**Carcinogenicity:** NTP NO IARC NO OSHA NO

## SECTION 4 - FIRST AID PROCEDURES

**Eye Contact:** IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES WHILE HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION.

**Skin Contact:** IMMEDIATELY REMOVE CONTAMINATED CLOTHING OR SHOES, WIPE EXCESS FROM SKIN AND FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. USE SOAP IF AVAILABLE OR FOLLOW BY WASHING WITH SOAP AND WATER. DO NOT REUSE CLOTHING UNTIL THOROUGHLY CLEANED. GET MEDICAL ATTENTION.

**Inhalation:** REMOVE VICTIM TO FRESH AIR AND PROVIDE OXYGEN IF BREATHING IS DIFFICULT. GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING. GET MEDICAL ATTENTION.

**Ingestion:** DO NOT INDUCE VOMITING. RINSE MOUTH WITH WATER. IF CONSCIOUS, GIVE LARGE QUANTITIES OF WATER OR MILK AND GET IMMEDIATE MEDICAL ATTENTION. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON!

ORIGINAL

### SECTION 5 - FIRE FIGHTING MEASURES

<b>Flash Point</b>	NOT APPLICABLE
<b>Extinguishing Media</b>	DOES NOT BURN. USE MEDIA APPROPRIATE FOR SURROUNDING MATERIALS. USE WATER SPRAY TO KEEP FIRE-EXPOSED CONTAINERS COOL.
<b>Special Firefighting Procedures/Precautions</b>	WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR. USE WATER TO COOL CONTAINERS BUT AVOID GETTING WATER INTO CONTAINERS.

### SECTION 6 - ACCIDENTAL RELEASE MEASURES

<b>For Spill:</b>	EVACUATE UNNECESSARY PERSONNEL. CONTAIN LIQUIDS AND PREVENT DISCHARGES INTO WATERWAYS AND SEWERS. DO NOT APPLY WATER TO THE LEAK. COLLECT AND PLACE IN CONTAINERS FOR DISPOSAL. NEUTRALIZE REMAINING TRACES WITH ANY DILUTE INORGANIC ACID (HYDROCHLORIC, SULFURIC, OR ACETIC ACID).
-------------------	--

### SECTION 7 - HANDLING AND STORAGE

Keep container tightly closed when not in use. Store in a cool, dry, well-ventilated area away from direct sunlight, heat and incompatible materials. Protect containers from physical damage.

AVOID STORING NEXT TO STRONG ACIDS. IF PRODUCT IS ADDED TO RAPIDLY, OR WITHOUT STIRRING, AND BECOMES CONCENTRATED AT BOTTOM OF MIXING VESSEL, EXCESSIVE HEAT MAY BE GENERATED, RESULTING IN DANGEROUS BOILING AND SPLATTERING, AND A POSSIBLE (IMMEDIATE AND VI

### SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>Respiratory Protection</b>	USE A NIOSH/MSHA APPROVED RESPIRATOR FOLLOWING MANUFACTURER'S RECOMMENDATIONS WHERE DUST OR MIST MAY BE GENERATED.
<b>Ventilation</b>	LOCAL AND MECHANICAL RECOMMENDED.
<b>Protective Gloves</b>	CHEMICAL IMPERVIOUS GLOVES.
<b>Eye/Face Protection</b>	CHEMICAL SAFETY GOGGLES AND/OR FULL-FACE SHIELD.
<b>Other Protection</b>	CHEMICAL RESISTANT CLOTHING SUCH AS COVERALLS/APRON, BOOTS, ETC. EMERGENCY SHOWER AND EYEWASH FACILITY SHOULD BE IN CLOSE PROXIMITY.
<b>Work Practices</b>	USE GOOD PERSONAL HYGIENE PRACTICES. WASH HANDS BEFORE EATING, DRINKING, SMOKING, OR USING TOILET FACILITIES. PROMPTLY REMOVE SOILED CLOTHING AND WASH THOROUGHLY BEFORE REUSE. SHOWER AFTER WORK USING PLENTY OF SOAP AND WATER

### SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Boiling Point (°F):</b>	50 - 251	<b>Vapor Pressure (mmHg):</b>	135 - 13
<b>Freezing Point (°F):</b>	-230 - 84	<b>Vapor Density (Air=1):</b>	NOT ESTABLISHED
<b>Solubility (H<sub>2</sub>O):</b>	COMPLETE	<b>Specific Gravity (H<sub>2</sub>O=1):</b>	1.11 - 1.53
<b>pH</b>	14	<b>Evaporation Rate:</b>	ND
<b>Appearance/Odor:</b>	COLORLESS TO SLIGHTLY HAZY LIQUID WITH NO APPRECIABLE ODOR.		

### SECTION 10 - STABILITY AND REACTIVITY

<b>Chemical Stability:</b>	YES
<b>Incompatible Materials:</b>	REACTS WITH WATER, ACIDS, METALS, AND REDUCING SUGARS (FRUCTOSE).
<b>Decomposition Products:</b>	NONE KNOWN.
<b>Hazardous Polymerization:</b>	WILL NOT OCCUR.

ORIGINAL

**SECTION 11 - TOXICITY INFORMATION**

ACUTE ORAL LD50 (rat) = 1200 mg/kg  
ACUTE DERMAL LD50 (rabbit) = 1350 mg/kg

**SECTION 12 - ECOLOGICAL INFORMATION**

LC50/96HR/FATHEAD MINNOW/179 MG/L  
EC50/96HR/WATER FLEA/42 MG/L  
EC50/96HR/GREEN ALGAE/41 MG/L

LD50 (IP)/MOUSE/40 MG/KG

**SECTION 13 - DISPOSAL CONSIDERATIONS**

DISPOSE OF WASTE MATERIALS ACCORDING TO ALL FEDERAL, STATE, AND LOCAL REGULATIONS.

**SECTION 14 - TRANSPORT INFORMATION**

USA DOT Shipping Name: SODIUM HYDROXIDE, SOLUTION

Hazard Class: 8

UN/NA Number: UN1824

Packing Group: II

Subsidiary Hazard:

Marine Pollutant: NO

**SECTION 15 - REGULATORY INFORMATION**

CERCLA RQ (lbs): 1000

SARA Title III Section 312:

☒ Acute ☐ Chronic ☐ Flammable ☐ Sudden Release of Pressure ☒ Reactive

SARA Title III Section 313: No

SARA Extremely Hazardous Substance: No

**HMIS HAZARD RATING**

Health: 3 Fire: 0 Reactivity: 2  
0 - Least 1 - Slight 2 - Moderate 3 - High 4 - Extreme

**SECTION 16 - OTHER INFORMATION**

EPA Pesticide Registration Number: NOT APPLICABLE

NSF Maximum Use Level for Potable Water (Standard 60): 100 mg/l

TSCA (Toxic Substance Control Act), 40 CFR 710:

Sources of the raw materials used in this mixture assure that all chemical ingredients present are in compliance with Section 8(b) Chemical Substance Inventory, or are otherwise in compliance with TSCA.

**DISCLAIMER**

THE DATA PRESENTED IS TRUE AND CORRECT TO THE BEST OF OUR KNOWLEDGE AND BELIEF; HOWEVER, NEITHER SELLER NOR PREPARER MAKES ANY WARRANTIES, EXPRESSED OR IMPLIED, CONCERNING THE INFORMATION PRESENTED. THE USER IS CAUTIONED TO PERFORM HIS OWN HAZARD EVALUATION AND TO RELY UPON HIS OWN DETERMINATIONS.

09/11/13



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

\$40/dm

**2. Contamination Limits (maximum limit before surcharges apply):**

Any free liquids or non-conforming to profile-Reject

**3. Surcharge Pricing:**

NA

**4. Special Testing Requirements:**

None There cannot be any free liquids. Mix the dirt 50 grams w/ 50 ml of water and run the pH. If the pH is greater than 12.5 then the solids box must be free of any liquids of any type. There cannot be any free liquids.

**5. Treatment and Handling Protocol:**

Class 1 solids box

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☐ Subcategory B

☐ Subcategory C

**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**7. Tests for Product Recovered/Recycled (if applicable):**

Na

**8. Management for Product Recovered/Recycled (if applicable):**

Na

2925

BETCO



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 8/12/2008

Dear **Zac or Dave**

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2925

**Expiration Date** 8/12/2010

**Generator:** BETCO

**Address:** 2780 N. Harvey Mitchell Parkway  
Bryan, TX 77807

### Waste Information

**Name of Waste:** Mineral hydraulic oil

**TCEQ Waste Code #:** Recycle

**Container Type:**

**Detailed Description of Process Generating Waste:**

Equipment for building metal structures

**Color:** dark

**Odor:** petroleum

**pH:** na

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**

level d

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

LRP  
Need the PFI. The material cannot be an emulsion. The oil cannot be water soluble. There must be a distinct water + oil layer break.

DB



4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676

<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

### SECTION 1: Generator Information

Company: Betco  
Address: 2780 N. HARVEY MITCHELL PKWY  
City: BRYAN State: TX Zip: 77807  
Contact: JENNIFER WRIGHT Title: GM  
Phone Number: 979-778-6176 Fax Number: 979-778-9975  
24/hr Phone Number: \_\_\_\_\_  
US EPA ID No: TXCESQG  
State ID No: CESQG SIC Code: \_\_\_\_\_

### SECTION 2: Billing Information - ☐ Same as Above

Company: CKG SERVICES  
Address: 10707 HONEA EGYPT RIAD  
City: MONTGOMERY State: TX Zip: 77316  
Contact: JAMIE BADER Title: AP  
Phone Number: 936-483-3662 Fax Number: 936-756-1226

### SECTION 3: General Description of the Waste

Name of Waste: MINERAL HYDRAULIC OIL  
Detailed Description of Process Generating Waste: EQUIPMENT FOR BUILDING METAL STRUCTURES

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: DARK Odor: PETROLEUM

Specific Gravity (water=1): .86-.9 Density: <8 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☒ Yearly ☐ One-Time

Quantity: 50

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☒ No

If "Yes", then please fill out the UHC Form



**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

None Known

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	0
TCLP Volatiles:	0
TCLP Semi-Volatiles:	0
Reactivity:	0
Corrosivity:	0
Ignitability:	0

**SECTION 9: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_

Date: 8/6/08

Printed Name/Title: Rae McLaughlin Agent Fee

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Rahmullah

Date: 8-12-08

☒ Approved

☐ Rejected

Approval Number: 2925

**SECTION 10: Waste Receipt Classification Under 40 CFR 437**

Is this material a wastewater or wastewater sludge?

If 'Yes', complete this section.

☒ YES

☒ NO

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes

Attention: the data below are typical values and do not constitute a specification.

Color: Yellow

Physical State: Liquid

Odor: Petroleum odor

pH: Not Applicable

Vapor Pressure: <0.01 mmHg @ 37.8 °C (100 °F)

Vapor Density (Air = 1): >1

Boiling Point: >315°C (599°F)

Solubility: Soluble in hydrocarbon solvents; insoluble in water.

Freezing Point: Not Applicable

Specific Gravity: 0.86 - 0.9 @ 15.6°C (60.1°F) / 15.6°C (60.1°F)

Density: 0.86 kg/l - 0.9 kg/l @ 15°C (59°F)

Volatile Organic

Compounds (VOC): <2.1 % weight

Viscosity: 28.8 cSt @ 40°C (104°F) (Min)

#### SECTION 10 STABILITY AND REACTIVITY

**Chemical Stability:** This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Incompatibility With Other Materials:** May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

**Hazardous Decomposition Products:** None known (None expected)

**Hazardous Polymerization:** Hazardous polymerization will not occur.

#### SECTION 11 TOXICOLOGICAL INFORMATION

##### IMMEDIATE HEALTH EFFECTS

**Eye Irritation:** The eye irritation hazard is based on evaluation of data for similar materials or product components.

**Skin Irritation:** The skin irritation hazard is based on evaluation of data for similar materials or product components.

**Skin Sensitization:** No product toxicology data available.

**Acute Dermal Toxicity:** The acute dermal toxicity hazard is based on evaluation of data for similar materials or product components.

**Acute Oral Toxicity:** The acute oral toxicity hazard is based on evaluation of data for similar materials or product components.

**Acute Inhalation Toxicity:** The acute inhalation toxicity hazard is based on evaluation of data for similar materials or product components.

##### ADDITIONAL TOXICOLOGY INFORMATION:

This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as: carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B). These oils have not been classified by the American Conference of Governmental Industrial Hygienists (ACGIH) as: confirmed human carcinogen (A1), suspected human carcinogen (A2), or confirmed animal carcinogen with unknown relevance to humans (A3).

#### SECTION 12 ECOLOGICAL INFORMATION

##### ECOTOXICITY

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Chevron-Ryton® Oil AW.  
MSDS: 10910.

5d

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EPAHQ106000819

48 hour(s) EC50: >1000 mg/l (Daphnia magna)  
96 hour(s) LC50: >1000 mg/l (Oncorhynchus mykiss)  
This material is not expected to be harmful to aquatic organisms.

**ENVIRONMENTAL FATE**

This material is not expected to be readily biodegradable.

**SECTION 13 DISPOSAL CONSIDERATIONS**

Use material for its intended purpose or recycle if possible. Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.

**SECTION 14 TRANSPORT INFORMATION**

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

**DOT Shipping Description:** PETROLEUM LUBRICATING OIL, NOT REGULATED AS A HAZARDOUS MATERIAL FOR TRANSPORTATION UNDER 49 CFR

**Additional Information:** NOT HAZARDOUS BY U.S. DOT. ADR/RID HAZARD CLASS NOT APPLICABLE.

**IMO/IMDG Shipping Description:** PETROLEUM LUBRICATING OIL; NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER THE IMDG CODE

**ICAO/IATA Shipping Description:** PETROLEUM LUBRICATING OIL; NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER ICAO

**SECTION 15 REGULATORY INFORMATION****EPCRA 311/312 CATEGORIES:**

1. Immediate (Acute) Health Effects:	NO
2. Delayed (Chronic) Health Effects:	NO
3. Fire Hazard:	NO
4. Sudden Release of Pressure Hazard:	NO
5. Reactivity Hazard:	NO

**REGULATORY LISTS SEARCHED:**

01-1-IARC Group 1	03-EPCRA 312
01-2A-IARC Group 2A	04-CA Proposition 65
01-2B-IARC Group 2B	05-MA RTK
02-NTP Carcinogen	06-NJ RTK
	07-PA RTK

No components of this material were found on the regulatory lists above.

**CHEMICAL INVENTORIES:**

All components comply with the following chemical inventory requirements: AICS (Australia), DSL (Canada), ENCS (Japan), IECSC (China), KECI (Korea), PICCS (Philippines), TSCA (United States).

One or more components is listed on ELINCS (European Union). Secondary notification by the importer may be

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Chevron Rykon® Oil AW  
MSDS: 10010

required. All other components are listed or exempted from listing on EINECS.

**NEW JERSEY RTK CLASSIFICATION:**

Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A. 34:5A-1 et. seq., the product is to be identified as follows: PETROLEUM OIL (Hydraulic oil)

**WHMIS CLASSIFICATION:**

This product is not considered a controlled product according to the criteria of the Canadian Controlled Products Regulations.

**SECTION 16 OTHER INFORMATION:**

**NFPA RATINGS:** Health: 0 Flammability: 1 Reactivity: 0

**HMIS RATINGS:** Health: 1 Flammability: 1 Reactivity: 0

(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, \*-Chronic Effect Indicator): These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

**LABEL RECOMMENDATION:**

Label Category : INDUSTRIAL OIL 1 - IND1

**REVISION STATEMENT:** This revision updates the following sections of this Material Safety Data Sheet: 2, 15.  
**Revision Date:** January 15, 2007

**ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:**

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	PEL - Permissible Exposure Limit
ACGIH - American Conference of Government Industrial Hygienists	CAS - Chemical Abstract Service Number
API - American Petroleum Institute	IMO/IMDG - International Maritime Dangerous Goods Code
CVX - Chevron	MSDS - Material Safety Data Sheet
DOT - Department of Transportation (USA)	NFPA - National Fire Protection Association (USA)
IARC - International Agency for Research on Cancer	NTP - National Toxicology Program (USA)
	OSHA - Occupational Safety and Health Administration

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the

Revision Number: 4  
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Chevron Rykon® Oil AW  
MSDS : 10910

ANSI MSDS Standard (Z400.1) by the Chevron Energy Technology Company, 100 Chevron Way, Richmond, California 94802.

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

Revision Number: 4  
Revision Date: January 15, 2007

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Chevron Rykon® Oil AW  
MSDS: 10910

g'd

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EPAHQ106000822



# Material Safety Data Sheet

## SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

### Chevron Rykon® Oil AW

**Product Use:** Hydraulic Oil.

**Product Number(s):** CPS229001, CPS229002, CPS229003

**Synonyms:** Chevron Rykon® Oil AW ISO 32, Chevron Rykon® Oil AW ISO 46, Chevron Rykon® Oil AW ISO 68.

#### Company Identification

Chevron Products Company  
a division of Chevron U.S.A. Inc.  
8001 Bollinger Canyon Road  
San Ramon, CA 94583  
United States of America  
www.chevronlubricants.com

#### Transportation Emergency Response

CHEMTREC: (800) 424-9300 or (703) 527-3887

#### Health Emergency

Chevron Emergency Information Center: Located in the USA. International collect calls accepted. (800) 231-0623 or (510) 231-0623

#### Product Information

email: lubemsds@Chevron.com

Product Information: (800) LUBE TEK

MSDS Requests: (800) 414-6737

## SECTION 2 COMPOSITION/ INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	AMOUNT
Highly refined mineral oil (C15 - C50)	Mixture	90 - 100 %weight

## SECTION 3 HAZARDS IDENTIFICATION

#### IMMEDIATE HEALTH EFFECTS:

**Eyes:** Not expected to cause prolonged or significant eye irritation.

**Skin:** Contact with the skin is not expected to cause prolonged or significant irritation. Not expected to be harmful to internal organs if absorbed through the skin. High-Pressure Equipment Information: Accidental high-velocity injection under the skin of materials of this type may result in serious injury. Seek medical attention at once should an accident like this occur. The initial wound at the injection site may not appear to be serious at first; but, if left untreated, could result in disfigurement or amputation of the affected part.

**Ingestion:** Not expected to be harmful if swallowed.

**Inhalation:** Not expected to be harmful if inhaled. Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.

Revision Number: 4  
Revision Date: January 15, 2007

1 of 7

Chevron Rykon® Oil AW  
MSDS: 10910

**SECTION 4: FIRST AID MEASURES**

**Eye:** No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.

**Skin:** No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

**Ingestion:** No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.

**Inhalation:** No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

**Note to Physicians:** In an accident involving high-pressure equipment, this product may be injected under the skin. Such an accident may result in a small, sometimes bloodless, puncture wound. However, because of its driving force, material injected into a fingertip can be deposited into the palm of the hand. Within 24 hours, there is usually a great deal of swelling, discoloration, and intense throbbing pain. Immediate treatment at a surgical emergency center is recommended.

**SECTION 5: FIRE FIGHTING MEASURES**

Leaks/ruptures in high pressure system using materials of this type can create a fire hazard when in the vicinity of ignition sources (eg. open flame, pilot lights, sparks, or electric arcs).

**FIRE CLASSIFICATION:**

OSHA Classification (29 CFR 1910.1200): Not classified by OSHA as flammable or combustible.

**NFPA RATINGS:** Health: 0 Flammability: 1 Reactivity: 0

**FLAMMABLE PROPERTIES:**

**Flashpoint:** (Cleveland Open Cup) 170 °C (338 °F) (Min)

**Autoignition:** No Data Available

**Flammability (Explosive) Limits (% by volume in air):** Lower: Not Applicable Upper: Not Applicable

**EXTINGUISHING MEDIA:** Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

**PROTECTION OF FIRE FIGHTERS:**

**Fire Fighting Instructions:** This material will burn although it is not easily ignited. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

**Combustion Products:** Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Protective Measures:** Eliminate all sources of ignition in vicinity of spilled material.

**Spill Management:** Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

**Reporting:** Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800)

424-8802 as appropriate or required.

#### SECTION 7: HANDLING AND STORAGE

**Precautionary Measures:** DO NOT USE IN HIGH PRESSURE SYSTEMS in the vicinity of flames, sparks and hot surfaces. Use only in well ventilated areas. Keep container closed.

**General Handling Information:** Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

**Static Hazard:** Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.106, 'Flammable and Combustible Liquids', National Fire Protection Association (NFPA) 77, 'Recommended Practice on Static Electricity', and/or the American Petroleum Institute (API) Recommended Practice 2003, 'Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents'.

**Container Warnings:** Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

##### GENERAL CONSIDERATIONS:

Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

##### ENGINEERING CONTROLS:

Use in a well-ventilated area.

##### PERSONAL PROTECTIVE EQUIPMENT

**Eye/Face Protection:** No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

**Skin Protection:** No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances in the workplace. Suggested materials for protective gloves include: 4H (PE/EVAL), Nitrile Rubber, Silver Shield, Viton.

**Respiratory Protection:** No respiratory protection is normally required.

If user operations generate an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge.

Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

#### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Revision Number: 4  
Revision Date: January 18, 2007

1 of 7

Chevron Rylor® Oil AW  
MSDS: 10910



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

\$65/dm water in drums  
If No water \$15/dm

**2. Contamination Limits (maximum limit before surcharges apply):**

None, Non conforming to profile

**3. Surcharge Pricing:**

N one

**4. Special Testing Requirements:**

% water  
% Oil  
Flash  
Chlor-d-tect

**5. Treatment and Handling Protocol:**

Used Oil /Oily Water

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☒ Subcategory B

☐ Subcategory C

7. **Tests for Product Recovered/Recycled (if applicable):**

Used oil tests

8. **Management for Product Recovered/Recycled (if applicable):**

See if it can go to Base Oil

2926  
BETCO



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 8/12/2008

Dear **Zac or Dave**

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2926

**Expiration Date** 8/12/2010

**Generator:** BETCO

**Address:** 2780 N. Harvey Mitchell Parkway  
Bryan, TX 77807

### Waste Information

**Name of Waste:** Paint waste

**TCEQ Waste Code #:** CESQ2011

**Container Type:**

**Detailed Description of Process Generating Waste:**

New steel buildings painted in paint booth, paint is from booth change

**Color:** multi

**Odor:** none

**pH:** na

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000829

Need the PFI - Material declared  
non Hazy - No Flash - Disposal would  
be Sludge box probably class 1.

**CES Environmental  
Services, Inc.**

4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

**SECTION 1: Generator Information**

Company: Betco  
Address: 2780 N. HARVEY MITCHELL PKWY  
City: BRYAN State: TX Zip: 77807  
Contact: JENNIFER WRIGHT Title: GM  
Phone Number: 979-778-6176 Fax Number: 979-778-9975  
24/hr Phone Number: \_\_\_\_\_  
US EPA ID No: TXCESQG  
State ID No: CESQG SIC Code: \_\_\_\_\_

**SECTION 2: Billing Information - ☐ Same as Above**

Company: CKG SERVICES  
Address: 10707 HONEA EGYPT RIAD  
City: MONTGOMERY State: TX Zip: 77316  
Contact: JAMIE BADER Title: AP  
Phone Number: 936-483-3662 Fax Number: 936-756-1226

**SECTION 3: General Description of the Waste**

Name of Waste: PAINT WASTE  
Detailed Description of Process Generating Waste: NEW STEEL BUILDINGS PAINTED IN PAINT  
BOOTH, PAINT IS FROM BOOTH CHANGE

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: MULTI Odor: NONE

Specific Gravity (water=1): 7.1 Density: >8 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☒ Yearly ☐ One-Time

Quantity: 50

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☒ No

If "Yes", then please fill out the UHC Form



**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.

MSDS

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

None Known

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	0
TCLP Volatiles:	0
TCLP Semi-Volatiles:	0
Reactivity:	0
Corrosivity:	0
Ignitability:	0

**SECTION 9: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature:

Date:

8/14/08

Printed Name/Title:

Zach McKenstry Agent Env

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer:

Robert Hand

Date: 8-12-08

☒ Approved

☐ Rejected

Approval Number:

2926

**SECTION 10: Waste Receipt Classification Under 40 CFR 437**

Is this material a wastewater or wastewater sludge?

☐ YES ☐ NO

If 'Yes', complete this section.

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.**

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes

## MATERIAL SAFETY DATA SHEET

75601

CAROLINA SOLVENTS, INC.  
2274 1ST STREET, SOUTHEAST  
HICKORY, NORTH CAROLINA 28601

DATE PREPARED: 01/16/2006  
PHONE: (828) 322-1920  
CHEMTRAC: (800) 424-9300

## SECTION 1 - IDENTITY

M10120

PRODUCT NAME: 75601 W/B RED OXIDE PRIMER  
CHEMICAL NAME: NOT APPLICABLE.  
PRODUCT CLASS: WATER BASED PRIMER

15A NCAC 2D.0518 NON-REACTIVE

## SECTION 2 - HAZARDOUS INGREDIENTS

% BY WT	MATERIAL DESCRIPTION	CAS REGISTRY #	ACGIH TLV	OSHA PEL	VAPOR PRES. mm Hg @ 20C
20	Non-hazardous, Non-volatile Material	Unknown			Unknown
8 *	2-Butoxyethanol	00111-76-2	25 ppm	25 ppm	<1
9	Metal Oxide Silicate	Unknown	0.1 mg/m3	0.1 mg/m3	Unknown
5 *	Secondary Butyl Alcohol	00078-57-2	100 ppm	100 ppm	Unknown

\* - Chemicals Regulated Under SARA 313

## SECTION 3 - TYPICAL PHYSICAL &amp; CHEMICAL DATA, NOT SPECIFICATIONS

VOC's (+/- 2%): 13% by Wt.; 18% by Vol.      APPROX. PROD. WT.: 9.4 Lbs/Gal  
SOLIDS (+/- 2%): 30% by Wt.; 18% by Vol.      BOILING RANGE (DEG. F): 212 to 340  
WATER/EXPT VOC's (+/- 2%): 57% by Wt.; 64% by Vol.      EVAPORATION RATE (ETHER = 1): <1  
HAP's: 0% by Wt.      VAPOR DENSITY (AIR = 1): >1  
APPEARANCE/ODOR: liquid with a characteristic odor.      SOLUBILITY IN WATER: Moderate

## SECTION 4 - FIRE &amp; EXPLOSION DATA

FLASH POINT (DEGREES F): Product will not flash.

EXTINGUISHING MEDIA: Foam, alcohol-type foam, carbon dioxide, dry chemical, water

SPECIAL FIREFIGHTING PROCEDURES: Closed containers exposed to extreme heat may rupture due to pressure buildup.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Water may be useful in keeping fire exposed containers cool.

=====75601 cont.  
SECTION 5 - PHYSICAL HAZARDS

STABILITY: Stable under normal conditions.

INCOMPATIBILITY: No hazardous reactions are expected under normal industrial conditions; product properties may be altered by mixing with some materials.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide and carbon dioxide.

HAZARDOUS POLYMERIZATION: Will not occur. No known conditions to avoid.

=====SECTION 6 - HEALTH AND SAFETY

ACUTE HEALTH HAZARD: Eye irritation. Possible skin irritation if contact is prolonged or repeated.

CHRONIC HEALTH HAZARD: No known chronic effects.

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EYES: Use safety glasses as needed to prevent direct contact. In case of direct contact, immediately flush eyes with large amounts of water and continue for at least fifteen minutes. Get medical attention if irritation persists.

SKIN: Use impermeable gloves and aprons as needed to prevent prolonged or repeated contact. In case of contact, wash skin with soap and water. Remove saturated clothing and shoes.

RESPIRATORY SYSTEM: Not normally required. If product exceeds TLV for a nuisance particulate, a NIOSH approved respirator for organic mists or dust should be used.

INGESTION: (( Seek Emergency Medical Attention! )) Do not induce vomiting.

OTHER PROTECTIVE EQUIPMENT: Eye bath (as needed, depending on use).

=====SECTION 7 - SPILL AND DISPOSAL PROCEDURES AND SPECIAL PRECAUTIONS

STEPS FOR MATERIAL SPILLAGE: Flush spilled material into suitable retaining areas or containers with large quantities of water. Small amounts of spilled material may be absorbed into an appropriate absorbant. Prevent spilled liquid from entering sewers, storm drains, or natural waterways.

WASTE DISPOSAL METHOD: In accordance with local, state, and federal regulations.

HANDLING AND STORAGE PRECAUTIONS: Avoid subjecting this product to extreme temperature variations and freezing. Shocking the emulsion with large amounts of chemicals or extreme shear may cause coagulation.

OTHER PRECAUTIONS: Minimal health and safety hazards are expected from use of this product. When working with any chemical compound, prudent handling practices should be exercised and unnecessary exposure avoided. If additional information is needed, contact Carolina Solvents, Hickory, NC.  
SUGGESTED HCS Ratings: H=1, F=0, R=0

## MATERIAL SAFETY DATA SHEET

275246

CAROLINA SOLVENTS, INC.  
2274 1ST. STREET, SOUTHEAST  
HICKORY, NORTH CAROLINA 28601

DATE PREPARED: 06/14/2000  
PHONE: (828) 322-1920  
CHEMTREC: (800) 424-9300

## SECTION 1 - IDENTITY

PAINT M10121

PRODUCT NAME: 2-75246 W/B BLACK PRIMER (LEGS ONLY)  
CHEMICAL NAME: NOT APPLICABLE.  
PRODUCT CLASS: W/B PRIMER

15A NCAC 2D.0518 NON-REACTIVE

## SECTION 2 - HAZARDOUS INGREDIENTS

% BY WT	MATERIAL DESCRIPTION	CAS REGISTRY #	ACGIH TLV	OSHA PEL	VAPOR PRES. mm Hg @ 20C
17	Non-hazardous, Non-volatile Material	Unknown			Unknown
2 *	2-(2-Butoxyethoxy)ethanol	00112-34-5	Not Estab.	Not Estab.	<1
6 *	2-Butoxyethanol	00111-76-2	25 ppm	25 ppm	<1
4 *	Carbon Black	01333-86-4	3.5 mg/m3	3.5 mg/m3	Unknown
2 *	Secondary Butyl Alcohol	00078-92-2	100 ppm	100 ppm	Unknown
18	Talc	14807-96-6	2 mg/m3	2 mg/m3	Unknown

\* - Chemicals Regulated Under SARA 313

## SECTION 3 - TYPICAL PHYSICAL &amp; CHEMICAL DATA, NOT SPECIFICATIONS

VOC's (+/- 2%): 9% by Wt.; 11% by Vol. APPROX. PROD. WT.: 9.5 Lbs/Gal  
SOLIDS (+/- 2%): 29% by Wt.; 20% by Vol. BOILING RANGE (DEG. F): 212 to 447  
WATER/EXPT VOC's (+/- 2%): 35% by Wt.; 40% by Vol. EVAPORATION RATE (ETHER = 1): <1  
HAP's: 7% by Wt. VAPOR DENSITY (AIR = 1): >1  
APPEARANCE/ODOR: Liquid with a characteristic odor. SOLUBILITY IN WATER: Moderate

## SECTION 4 - FIRE &amp; EXPLOSION DATA

FLASH POINT (DEGREES F): Product will not flash.

EXTINGUISHING MEDIA: Foam, alcohol-type foam, carbon dioxide, dry chemical, water

SPECIAL FIREFIGHTING PROCEDURES: Closed containers exposed to extreme heat may rupture due to pressure buildup.

UNUSUAL FIRE AND EXPLOSION HAZARDS Water may be useful in keeping fire exposed containers cool.

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EPAHQ106000835

275246cont.

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SECTION 5 - PHYSICAL HAZARDS

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STABILITY: Stable under normal conditions.

INCOMPATIBILITY: No hazardous reactions are expected under normal industrial conditions; product properties may be altered by mixing with some materials.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide and carbon dioxide.

HAZARDOUS POLYMERIZATION: Will not occur. No known conditions to avoid.

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SECTION 6 - HEALTH AND SAFETY

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ACUTE HEALTH HAZARD: Eye irritation. Possible skin irritation if contact is prolonged or repeated.

CHRONIC HEALTH HAZARD No known chronic effects.

EYES: Use safety glasses as needed to prevent direct contact. In case of direct contact, immediately flush eyes with large amounts of water and continue for at least fifteen minutes. Get medical attention if irritation persists.

SKIN: Use impermeable gloves and aprons as needed to prevent prolonged or repeated contact. In case of contact, wash skin with soap and water. Remove saturated clothing and shoes.

RESPIRATORY SYSTEM: Not normally required. If product exceeds TLV for a nuisance particulate, a NIOSH approved respirator for organic mists or dust should be used.

INGESTION: Give two or three glasses of milk, fruit juice or water. Get medical advice immediately in case of any unusual symptoms.

OTHER PROTECTIVE EQUIPMENT: Eye bath (as needed, depending on use).

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SECTION 7 - SPILL AND DISPOSAL PROCEDURES AND SPECIAL PRECAUTIONS

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STEPS FOR MATERIAL SPILLAGE: Flush spilled material into suitable retaining areas or containers with large quantities of water. Small amounts of spilled material may be absorbed into an appropriate absorbent. Prevent spilled liquid from entering sewers, storm drains, or natural waterways.

WASTE DISPOSAL METHOD: In accordance with local, state, and federal regulations.

HANDLING AND STORAGE PRECAUTIONS: Avoid subjecting this product to extreme temperature variations and freezing. Shocking the emulsion with large amounts of chemicals or extreme shear may cause coagulation.

OTHER PRECAUTIONS: Minimal health and safety hazards are expected from use of this product. When working with any chemical compound, prudent handling practices should be exercised and unnecessary exposure avoided.

If additional information is needed, contact Carolina Solvents, Hickory, NC.

SUGGESTED HMIS Rating: H=1, F=0, R=0

## MATERIAL SAFETY DATA SHEET

275422

CAROLINA SOLVENTS, INC.

DATE PREPARED: 01/26/2006

~~2274 1ST STREET, SOUTHEAST~~~~PHONE: (828) 322-1920~~

HICKORY, NORTH CAROLINA 28601

CHEMTREC: (800) 424-9300

## SECTION 1 - IDENTITY

M10014

PRODUCT NAME: 2-75422 W/B RED OXIDE PRIMER MEXICO

CHEMICAL NAME: NOT APPLICABLE.

PRODUCT CLASS: W/B PRIMER

15A NCAC 2D.0518 NON-REACTIVE

## SECTION 2 - HAZARDOUS INGREDIENTS

% BY WT	MATERIAL DESCRIPTION	CAS REGISTRY #	ACGIH TLV	OSHA PEL	VAPOR PRES. mm Hg @ 20C
15	Non-hazardous, Non-volatile Material	Unknown			Unknown
8 *	2-Butoxyethanol	00111-76-2	25 ppm	25 ppm	<1
<1 *	Carbon Black	01333-86-4	3.5 mg/m3	3.5 mg/m3	Unknown
1	Isobutanol	00078-83-1	50 ppm	50 ppm	10.00
10	Metal Oxide Silicate	Unknown	0.1 mg/m3	0.1 mg/m3	Unknown
2 *	Secondary Butyl Alcohol	00078-92-2	100 ppm	100 ppm	Unknown
12	Talc	14807-96-6	2 mg/m3	2 mg/m3	Unknown
1 *	Triethylamine	00121-44-8	10 ppm	10 ppm	54.00

\* - Chemicals Regulated Under SARA 313

## SECTION 3 - TYPICAL PHYSICAL &amp; CHEMICAL DATA, NOT SPECIFICATIONS

VOC's (+/- 2%): 13% by Wt.; 19% by Vol.

SOLIDS (+/- 2%): 38% by Wt.; 24% by Vol.

WATER/EXPT VOC's (+/- 2%): 49% by Wt.; 57% by Vol.

MAP's: 1% by Wt.

APPEARANCE/ODOR: Liquid with a characteristic odor.

APPROX. PROD. WT.: 9.8 Lbs/Gal

BOILING RANGE (DEG. F): 194 to 340

EVAPORATION RATE (ETHER = 1): &lt;1

VAPOR DENSITY (AIR = 1): &gt;1

SOLUBILITY IN WATER: Moderate

## SECTION 4 - FIRE &amp; EXPLOSION DATA

FLASH POINT (DEGREES F): Product will not flash.

EXTINGUISHING MEDIA: Foam, alcohol-type foam, carbon dioxide, dry chemical, water

SPECIAL FIREFIGHTING PROCEDURES: Closed containers exposed to extreme heat may rupture due to pressure buildup.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Water may be useful in keeping fire exposed containers cool.

275422cont.

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SECTION 5 - PHYSICAL HAZARDS

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~~STABILITY: Stable under normal conditions.~~

INCOMPATIBILITY: No hazardous reactions are expected under normal industrial conditions; product properties may be altered by mixing with some materials.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide and carbon dioxide.

HAZARDOUS POLYMERIZATION: Will not occur. No known conditions to avoid.

---

SECTION 6 - HEALTH AND SAFETY

---

ACUTE HEALTH HAZARD: Eye irritation. Possible skin irritation if contact is prolonged or repeated.

CHRONIC HEALTH HAZARD: No known chronic effects.

EYES: Use safety glasses as needed to prevent direct contact. In case of direct contact, immediately flush eyes with large amounts of water and continue for at least fifteen minutes. Get medical attention if irritation persists.

SKIN: Use impermeable gloves and aprons as needed to prevent prolonged or repeated contact. In case of contact, wash skin with soap and water. Remove saturated clothing and shoes.

RESPIRATORY SYSTEM: Not normally required. If product exceeds TLV for a nuisance particulate, a NIOSH approved respirator for organic mists or dust should be used.

INGESTION: << Seek Emergency Medical Attention! >> Do not induce vomiting.

OTHER PROTECTIVE EQUIPMENT: Eye bath (as needed, depending on use).

---

SECTION 7 - SPILL AND DISPOSAL PROCEDURES AND SPECIAL PRECAUTIONS

---

STEPS FOR MATERIAL SPILLAGE: Flush spilled material into suitable retaining areas or containers with large quantities of water. Small amounts of spilled material may be absorbed into an appropriate absorbant. Prevent spilled liquid from entering sewers, storm drains, or natural waterways.

WASTE DISPOSAL METHOD: In accordance with local, state, and federal regulations.

HANDLING AND STORAGE PRECAUTIONS: Avoid subjecting this product to extreme temperature variations and freezing. Shocking the emulsion with large amounts of chemicals or extreme shear may cause coagulation.

OTHER PRECAUTIONS: Minimal health and safety hazards are expected from use of this product. When working with any chemical compound, prudent handling practices should be exercised and unnecessary exposure avoided.

If additional information is needed, contact Carolina Solvents, Hickory, NC.  
SUGGESTED HMIS Rating: H=1, F=0, R=0



**CES Environmental  
Services, Inc.**

**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

\$65/dm

**2. Contamination Limits (maximum limit before surcharges apply):**

None, Non conforming to profile

**3. Surcharge Pricing:**

N one

**4. Special Testing Requirements:**

Odor-Does it have solvent odor  
Flash

**5. Treatment and Handling Protocol:**

Class 1 liquids or sludge depending on consistancy

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☐ Subcategory B

☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**7. Tests for Product Recovered/Recycled (if applicable):**

Na

**8. Management for Product Recovered/Recycled (if applicable):**

Na

2928

Sunset Farms Landfill



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 8/14/2008

Dear Michael Simpkins

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2928

**Expiration Date** 8/14/2010

**Generator:** Sunset Farms Landfill

**Address:** 9912 Giles Road  
Austin, TX 78754

### Waste Information

**Name of Waste:** condensate water

**TCEQ Waste Code #:** CESQ2192

**Container Type:**

**Detailed Description of Process Generating Waste:**

landfill rainwater purged thru waste collected and stored

**Color:** clear

**Odor:** slight

**pH:** 4.6

**Physical State:**

**Incompatibilities:**

**Safety Related Data/Special Handling:**

None

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000842

EP  
OK

DC



4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

**SECTION 1: Generator Information**

Company: Sunset Farms Landfill  
Address: 9912 giles Rd  
City: Austin State: TX Zip: 78754  
Contact: Everett Moore Title: Manager  
Phone Number: 512-922-0573 Fax Number: 512-247-4884  
24/hr Phone Number: 512-247-5647  
US EPA ID No: TXCESQG  
State ID No: CESQG SIC Code: na

**SECTION 2: Billing Information - ☐ Same as Above**

Company: Magna-Flow Environmental Inc.  
Address: PO Box 26129  
City: Austint State: TX Zip: 78755  
Contact: Michael Simpkins Title: Division Pres  
Phone Number: 512-217-3170 Fax Number: 512-451-7109

**SECTION 3: General Description of the Waste**

Name of Waste: Condensate water  
Detailed Description of Process Generating Waste:

Landfill rainwater purged thru waste collected and stored

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: clear Odor: slight

Specific Gravity (water=1): 1 Density: 8.44 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☐ Truck ☒ Other (explain)

Frequency: ☒ Weekly ☐ Monthly ☐ Yearly ☐ One-Time

Quantity: 7000 gallons

☐ Yes ☒ No

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)  
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009  
☐ D010 ☐ D011

na

☐ Yes ☒ No

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No

If "Yes", then please list ALL applicable codes:

CE502192

Class: NA UN/NA:

Non RCRA NonDOT Regulated Waste  
NA PG: NA RQ: NA

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>150		4.6		na <u>mg/l</u>		na <u>mg/l</u>		0-1 %	
Oil & Grease		TOC		Zinc		Copper		Nickel	
<1500	<u>mg/l</u>	8000	<u>mg/l</u>	0.121	<u>mg/l</u>	0.042	<u>mg/l</u>	2.886	<u>mg/l</u>

[illegible]

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

no

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. TCLP # 68056

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

na

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:

TCLP Volatiles:

TCLP Semi-Volatiles:

Reactivity:

Corrosivity:

Ignitability:

**SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)**

Is this material a wastewater or wastewater sludge?



YES



NO

If 'Yes', complete this section.

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.**

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☒ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☒ Organics Subcategory

**SECTION 10 Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

**SECTION 11: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☒ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Everett Moore Date: 8/14/2008

Printed Name/Title: Everett Moore Landfill Manager

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Richard [Signature]

Date: 8-14-08

☒ Approved

☐ Rejected

Approval Number: 2928



## PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

### 1. Base Pricing (including freight):

Disposal: \$0.20/gallon ; Magnaflo will bring water to me.

### 2. Contamination Limit (maximum limit before surcharges apply):

TOC: 20,000; Solids: 25%

### 3. Surcharge Pricing:

TOC: \$0.03/gallon/5000 to greater 20,000; Solids: \$0.01/gallon/percent greater than 25%

### 4. Special Testing Requirements:

Solids, pH, oils, TOC, phenol, Nickel

### 5. Treatment and Handling Protocol:

### 6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A    ☐ Subcategory B    ☒ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

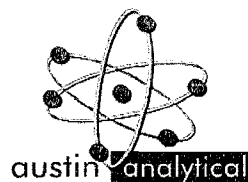
**7. Tests for Product Recovered/Recycled (if applicable):**

NA
----

**8. Management for Product Recovered/Recycled (if applicable)**

NA
----

Jon Anstey  
BFI Sunset Farms  
9912 Giles Rd.  
Austin, TX 78754



Control # 68057

**Project****Sample** Condensate for Tessman**Matrix** water**Date/Time Taken** Aug 6, 2008**Date/Time Rec'd** Aug 6, 2008 10:50

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>SQL</u>	<u>Date/Time Run</u>	<u>By</u>	<u>Method</u>	<u>Blank</u>	<u>RPDLimit</u>	<u>MS</u>	<u>MSD</u>	<u>Limit</u>	<u>LCS</u>	<u>LCSD</u>	<u>Limit</u>
pH	4.6			8/6/08 17:12	MCK	150.1	0.4	10						
TPH, total	140	mg/L	20	8/6/08 15:41	MCK	TX1005	<20	12.1 75	116.9	103.5	125-20	85.1	83.7	80-120
TPH, C6-C12	110	mg/L	10	8/6/08 15:41	MCK	TX1005	<10	7.4 75	85.0	91.6	125-20	81.0	80.8	80-120
TPH, C12-C28	33	mg/L	10	8/6/08 15:41	MCK	TX1005	<10	14.8 75	122.6	105.6	125-20	89.3	86.7	80-120
TPH, C28-C36	<10	mg/L	10	8/6/08 15:41	MCK	TX1005	<10							
Antimony	0.064	mg/L	.005	8/6/08 18:38	MCK	6010B	<0.005	0.4 20	97.8	97.3	75-125	98.1	96.8	80-120
Arsenic	0.082	mg/L	.01	8/6/08 18:38	MCK	6010B	<0.01	0.4 20	110.8	111.3	75-125	99.1	97.7	80-120
Barium	0.027	mg/L	.005	8/6/08 18:38	MCK	6010B	<0.005	0.7 20	99.2	98.5	75-125	99.1	97.1	80-120
Beryllium	<0.0010	mg/L	.001	8/6/08 18:38	MCK	6010B	<0.001	0.2 20	90.8	90.6	75-125	100.1	97.6	80-120
Cadmium	<0.0050	mg/L	.005	8/6/08 18:38	MCK	6010B	<0.005	0.5 20	107.3	106.7	75-125	104.8	102.1	80-120
Chromium	<0.0050	mg/L	.005	8/6/08 18:38	MCK	6010B	<0.005	0.4 20	104.9	104.4	75-125	103.1	102.4	80-120
Lead	<0.010	mg/L	.01	8/6/08 18:38	MCK	6010B	<0.01	0.7 20	97.9	97.1	75-125	99.4	97.4	80-120
Mercury	0.0022	mg/L	.001	8/6/08 18:38	MCK	6010B	<0.001	1.7 20	103.5	101.7	75-125	103.7	102.0	80-120
Nickel	<0.0050	mg/L	.005	8/6/08 18:38	MCK	6010B	<0.005	0.5 20	98.4	97.8	75-125	98.7	96.3	80-120
Selenium	0.38	mg/L	.01	8/6/08 18:38	MCK	6010B	<0.01	1.3 20	88.0	86.8	75-125	100.3	98.7	80-120
Silver	<0.010	mg/L	.01	8/6/08 18:38	MCK	6010B	<0.01	1.1 20	94.6	93.6	75-125	100.9	99.5	80-120
B.O.D. (5-day)	7170	mg/L	2	8/7/08 13:30	PCS	5210B	<2							
Chemical Oxygen Demand	14429	mg/L	5	8/8/08 10:30	PCS	5220D	<5							

Methods from USEPA unless otherwise noted.

SQL - sample quantification limit (method quantification limit adjusted for sample dilution or concentration)

RPD - MS/MSD precision MS - matrix spike recovery MSD - matrix spike duplicate recovery

LCS/LCSD- laboratory control standard/duplicate recovery

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All analyses were successfully completed and met the requirements of NELAC Chapter 5 except where flagged or noted in an attached Case Narrative.

All estimated uncertainties of test results are within method specifications.

Respectfully submitted,

Mark C. Krause

3267 Bee Caves Suite 107 Austin, TX 78746 (512) 891-7777

Name	TOM ANSLEY
Company	BFI AUSTIN
Address	9912 GILLES RD.
City/State/Zip	AUSTIN, TX
Phone	
FAX	
e-mail	
Project	
Reference	
Collected By	

COC Number 114124

**QAPP attached?**

Y/N

## TRRP-compliant reporting?

Y / N

## # of Sample Containers

[illegible]

### Tests Assigned

[illegible]

## Lab #

[illegible][illegible]

Relinquished By	Date	Time	Received By	Date	Time
Relinquished By	Date	Time	Received By	Date	Time
Relinquished By	Date	Time	Received By	Date	Time
			<i>[Signature]</i>	8/16/02	1450

Notes: S-DAY ~~SE~~ RUSH

Ice present	(X) N	Intact	(X) / N
Temperature	5 °C	Headspace	Y / N



Jon Anstey  
BFI Sunset Farms  
9912 Giles Rd.  
Austin, TX 78754



Control # 68056

**Project****Sample** Condensate**Matrix** waste**Date/Time Taken** Aug 6, 2008**Date/Time Rec'd** Aug 6, 2008 10:50

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>SQL</u>	<u>Date/Time Run</u>		<u>By</u>	<u>Method</u>	<u>Blank RPD/Limit</u>		<u>MS</u>	<u>MSD</u>	<u>Limit</u>	<u>LCS</u>	<u>LCSD</u>	<u>Limit</u>
Ignitability	>150	F		8/6/08	17:26	MCK	1010	0.0				-10			
Acetone	<100	µg/Kg	100	8/6/08	21:09	MCK	8260C	<20	9.6	77.9	85.8		107.0	99.6	
Benzene	34	µg/Kg	5	8/6/08	21:09	MCK	8260C	<1	1.1 30	104.1	105.3	70-130	92.7	94.7	80-120
Bromobenzene	<5	µg/Kg	5	8/6/08	21:09	MCK	8260C	<1	4.1	87.7	91.4		75.4	84.8	
Bromodichloromethane	<5	µg/Kg	5	8/6/08	21:09	MCK	8260C	<1	13.1	84.7	96.6		80.6	80.5	
Bromoform	<10	µg/Kg	10	8/6/08	21:09	MCK	8260C	<2	13.1	70.2	80.1		83.4	81.5	
Bromomethane	<10	µg/Kg	10	8/6/08	21:09	MCK	8260C	<2	29.6	73.3	98.8		86.8	98.4	
2-butanone	<100	µg/Kg	100	8/6/08	21:09	MCK	8260C	<20	8.7	102.6	112.1		105.7	101.3	
n-Butylbenzene	7	µg/Kg	5	8/6/08	21:09	MCK	8260C	<1	0.9	94.6	95.5		89.1	89.8	
sec-Butylbenzene	18	µg/Kg	5	8/6/08	21:09	MCK	8260C	<1	0.6	104.1	104.8		94.0	98.9	
tert-Butylbenzene	180	µg/Kg	5	8/6/08	21:09	MCK	8260C	<1	3.3	96.6	99.9		88.8	92.4	
Carbon disulfide	<5	µg/Kg	5	8/6/08	21:09	MCK	8260C	<1	3.2	38.0	36.8		78.2	85.2	
Carbon tetrachloride	<5	µg/Kg	5	8/6/08	21:09	MCK	8260C	<1	6.2	97.7	91.8		80.8	15.9	
Chlorobenzene	<5	µg/Kg	5	8/6/08	21:09	MCK	8260C	<1	3.0 30	94.6	97.5	70-130	87.9	91.5	80-120
Chloroethane	<10	µg/Kg	10	8/6/08	21:09	MCK	8260C	<2	2.4	88.2	90.4		97.3	86.0	
Chloroform	<5	µg/Kg	5	8/6/08	21:09	MCK	8260C	<1	2.6 30	101.4	104.1	70-130	90.8	92.6	80-120
Chloromethane	<10	µg/Kg	10	8/6/08	21:09	MCK	8260C	<2	0.9	93.7	92.9		122.0	116.6	
Dibromochloromethane	<5	µg/Kg	5	8/6/08	21:09	MCK	8260C	<1	4.7	85.6	89.7		75.0	79.8	

Methods from USEPA unless otherwise noted.

SQL - sample quantification limit (method quantification limit adjusted for sample dilution or concentration)

RPD - MS/MSD precision MS - matrix spike recovery MSD - matrix spike duplicate recovery

LCS/LCSD - laboratory control standard/duplicate recovery

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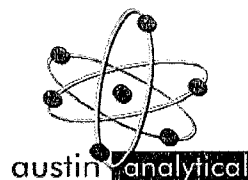
All analyses were successfully completed and met the requirements of NELAC Chapter 5 except where flagged or noted in an attached Case Narrative.

All estimated uncertainties of test results are within method specifications.

Respectfully submitted,

Mark C. Krause

Jon Anstey  
BFI Sunset Farms  
9912 Giles Rd.  
Austin, TX 78754



Control # 68056

**Project****Sample** Condensate**Matrix** waste**Date/Time Taken** Aug 6, 2008**Date/Time Rec'd** Aug 6, 2008 10:50

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>SQL</u>	<u>Date/Time Run</u>	<u>By</u>	<u>Method</u>	<u>Blank</u>	<u>RPDLimit</u>	<u>MS</u>	<u>MSD</u>	<u>Limit</u>	<u>LCS</u>	<u>LCSD</u>	<u>Limit</u>
Dibromomethane	<5	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	1.7	95.9	94.2		84.5	83.4	
1,2-dichlorobenzene	5.6	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	2.6 30	95.1	97.7	70-130	86.5	88.1	80-120
1,3-dichlorobenzene	<5	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	2.3	95.5	97.8		88.9	90.7	
1,4-dichlorobenzene	200	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	1.2	94.0	95.1		91.0	89.6	
Dichlorodifluoromethane	<10	µg/Kg	10	8/6/08 21:09	MCK	8260C	<2	6.5	79.8	85.2		118.1	101.3	
1,1-dichloroethane	<5	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	4.5	103.8	108.7		100.7	96.3	
1,2-dichloroethane	<5	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	3.6 30	95.1	98.6	70-130	89.9	89.2	80-120
1,1-dichloroethene	<5	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	1.1 30	104.6	103.4	70-130	93.8	91.2	80-120
cis-1,2-dichloroethene	<5	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	4.1	110.0	114.7		99.2	95.6	
trans-1,2-dichloroethene	<5	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	3.8	96.5	100.3		82.0	77.5	
1,2-dichloropropane	<5	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	5.0	95.1	100.1		90.8	90.8	
2,2-dichloropropane	<5	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	6.7	107.5	115.1		114.4	101.4	
cis-1,3-dichloropropene	<5	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	10.3	88.9	98.5		89.3	84.1	
trans-1,3-dichloropropene	<5	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	9.9	90.8	100.3		85.8	83.2	
1,3-dichloropropane	<5	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	4.9	89.5	94.0		83.9	84.4	
Ethylbenzene	330	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	4.1 30	102.3	106.6	70-130	90.6	98.5	80-120
2-Hexanone	1100	µg/Kg	25	8/6/08 21:09	MCK	8260C	<5	5.4	87.7	92.6		86.2	90.1	
4-methyl-2-pentanone	4600	µg/Kg	10	8/6/08 21:09	MCK	8260C	<2	6.2	95.9	102.1		95.6	96.1	
Methylene chloride	<10	µg/Kg	10	8/6/08 21:09	MCK	8260C	<2	6.2	73.5	78.3		88.9	81.7	
MTBE	<25	µg/Kg	25	8/6/08 21:09	MCK	8260C	<5	10.8	93.3	104.0		102.1	96.1	

Methods from USEPA unless otherwise noted.

SQL - sample quantification limit (method quantification limit adjusted for sample dilution or concentration)

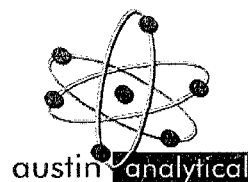
RPD - MS/MSD precision MS - matrix spike recovery MSD - matrix spike duplicate recovery

LCS/LCSD- laboratory control standard/duplicate recovery

8127 Mesa Dr., Suite C-350 • Austin, TX 78731 • (512) 891-7777

EPAHQ106000853

Jon Anstey  
BFI Sunset Farms  
9912 Giles Rd.  
Austin, TX 78754



Control # 68056

**Project**

**Sample** Condensate

**Matrix** waste

**Date/Time Taken** Aug 6, 2008

**Date/Time Rec'd** Aug 6, 2008 10:50

Analyte	Result	Units	SQL	Date/Time Run	By	Method	Blank	RPDLimit	MS	MSD	Limit	LCS	LCSD	Limit
Isopropylbenzene	27	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	4.1	95.6	99.7		82.0	92.2	
n-Propylbenzene	39	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	0.8	106.1	107.0		97.8	101.7	
p-Isopropyltoluene	180	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	3.3	96.6	99.9		88.8	92.4	
Styrene	73	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	4.5	80.8	84.6		102.2	109.6	
1,1,1,2-tetrachloroethane	<5	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	12.3	80.3	90.8		75.7	82.2	
1,1,2,2-tetrachloroethane	<10	µg/Kg	10	8/6/08 21:09	MCK	8260C	<2	6.5	86.0	91.8		82.6	88.1	
Tetrachloroethene	41	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	1.1	91.5	92.6		85.5	91.1	
Toluene	890	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	6.6 30	102.6	109.6	70-130	98.0	99.0	80-120
1,1,1-trichloroethane	<5	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	4.4	91.7	95.9		87.6	88.3	
1,1,2-trichloroethane	<5	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	0.2	89.0	89.2		81.3	82.5	
Trichloroethene	24	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	5.8	97.1	103.0		89.8	89.7	
Trichlorofluoromethane	<5	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	4.5	101.0	96.5		96.3	98.8	
1,2,4-trimethylbenzene	230	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	4.4	90.4	94.5		83.3	86.5	
1,3,5-trimethylbenzene	77	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	4.7	92.9	97.5		88.9	91.6	
Vinyl chloride	<10	µg/Kg	10	8/6/08 21:09	MCK	8260C	<2	4.3 30	97.9	102.3	70-130	104.6	102.1	80-120
m,p-Xylenes	750	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	7.1	106.6	114.5		102.7	110.7	
o-Xylene	310	µg/Kg	5	8/6/08 21:09	MCK	8260C	<1	6.0	95.9	101.8		88.9	94.4	
Dibromofluoromethane (surr)	surr	%		8/6/08 21:09	MCK	8260C			107.1		71-124			
Toluene-d8 (surr)	surr	%		8/6/08 21:09	MCK	8260C			97.4		85-115			
Bromofluorobenzene (surr)	surr	%		8/6/08 21:09	MCK	8260C			92.3		86-115			

Methods from USEPA unless otherwise noted.

SQL - sample quantification limit (method quantification limit adjusted for sample dilution or concentration)

RPD - MS/MSD precision MS - matrix spike recovery MSD - matrix spike duplicate recovery

LCS/LCSD- laboratory control standard/duplicate recovery

8127 Mesa Dr., Suite C-350 • Austin, TX 78731 • (512) 891-7777

EPAHQ106000854

*Austin Analytical*

**3267 Bee Caves Suite 107 Austin, TX 78746 (512) 891-7777**

COC Number 114123

Y/N

Y / 6

### Tests Assigned

[illegible]

Relinquished By	Date	Time	Received By	Date	Time	Notes:
						NEXT-DAY RUSH
Relinquished By	Date	Time	Received By	Date	Time	
Relinquished By	Date	Time	Received By	Date	Time	Ice present (Y) / N Intact (Y) / N
				8/6/83	1050	Temperature 5° C Headspace Y / N

EPАНО106000855



4904 Griggs Road  
Houston, TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1676

To: Dana Carter  
Cc: Matt bowman, Gary Peterson, Prabhaker,  
Matt Moser, Joe Camp

Date: 08/11/08

From: Miles Root

Lab Memo: 08-142

Subject: **Magnaflow Austin Evaluation 0808-09**

A sample of water from Magnaflow Austin, Austin, TX has been evaluated for processing at CES. This sample is evaluation 0808-09. This water is stated to be a leachate condensate from a landfill that may contain a slight amount of motor oil. The volume of this material may be up to three trailer loads.

One of the main issues with this water is the potential FO39 code it may have. This will need to be determined. A FO39 listed waste code will mean disposal at an offsite location, and this will affect the pricing.

This water does not treat well. There are many solids formed during the treatment process. These solids do not fall out of solution as is typical when treated. The solids remain suspended in solution, forming a type of sludge, and many solids are formed. If treated at CES, this material will most likely need to go through our normal water treat and then be filter pressed. The solids can be filtered without issue, but this extra handling solids disposal will need to be included in the costs.

No oil was seen in this water. All other parameters looked acceptable except for the nickel concentration, which was a bit high, at 2.9 ppm vs. 2.0 on our discharge limit. Dilution with other "good" water will be required if we treat this material on site.

The table below summarizes the analytical data.

Magnaflow Austin	
Evaluation 0808-09	
pH	6
Phenols, ppm	5
TOC, mg/L	2260
Oil, vol%	0
Chlor-d-tect, mg/L	N/A
Treatability	Poor
Metals, ppm	
Cd	0.057
Cr	0.123
Cu	0.042
Ni	2.886
Zn	0.121

2929

Citation - ~~F~~ Lufkin



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 8/15/2008

Dear **Melissa Saulsbury**

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2929

**Expiration Date**

**Generator:** Citation-Lufkin

**Address:** 1611 N. Raguet  
Lufkin, TX 75904-2143

**Waste Information**

**Name of Waste:** used oil

**TCEQ Waste Code #:** Recycle

**Container Type:**

**Detailed Description of Process Generating Waste:**

draining and collection of oil from various types of combustion and noncombustion equipment

**Color:** black, amber

**Odor:** oil like

**pH:** neutral

**Physical State:**

**Incompatibilities:** oxidizers

**Safety Related Data/Special Handling:**

level d

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000858

GRD  
Need to know if the material  
is a base oil or a black oil for  
billing. OK Black Oil  
Black Oil

**CES Environmental  
Services, Inc.**

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676

<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

**SECTION 1: Generator Information**

Company: Citation-Lufkin  
Address: 1611 N. Raguet  
City, State, Zip: Lufkin, TX 75904-2143  
Contact: Melissa Saulsbury Title: Environmental Technician  
Phone No: 936-633-4189 Fax No: 936-633-4120  
24/hr Phone: CES-713-676-1460  
U.S. EPA I.D. No: TXD008950461  
State I.D. 31246 SIC Code: 3322

**SECTION 2: Billing Information - ☐ Same as Above**

Company: Citation  
Address: P.O. Box 3718  
City, State, Zip: Lufkin  
Contact: Melissa Saulsbury Title: Environmental Technician  
Phone No: 936-633-4189 Fax No: 936-633-4120

**SECTION 3: General Description of the Waste**

Name of Waste: Used Oil

Detailed Description of Process Generating Waste: Draining and collection of oil from various types of combustion and non-combustion equipment

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: black, amber

Odor: Oil Like

Specific Gravity (water=1): .80

Density: 8 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☒ Single-phase ☒ Multi-phase

Container Type: ☐ Drum ☒ Tote ☐ Truck ☐ Other (explain)

Container Size: 300 g

Frequency: ☐ Weekly ☒ Monthly ☐ Quarterly ☐ Yearly

Number of Units (containers): 1-2 Other:       

Texas State Waste Code No: NA-Recyclable Material

Proper U.S. DOT Shipping Name: Non-RCRA; Non-DOT Regulated Material

Class: NA UN/NA: NA PG: NA RQ: NA

Flash Point >150	pH neutral	Reactive Sulfides 0mg/l	Reactive Cyanides 0mg/l	Solids 0-2%
Oil & Grease >1500mg/l	TOC >1500mg/l	Zinc 0mg/l	Copper 0mg/l	Nickel 0mg/l

#### SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	Concentration	Units
The waste consists of the following materials	Ranges are acceptable	or %
Mineral Oil-Petroleum Source	50-100	%
Motor Oil-VariouS Weights	50-100	%
Water	0-5	%
Dirt	0-2	%

#### SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Level D

#### SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.

CES Evaluation

#### SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

oxidizers

#### SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: ☒ X  
TCLP Volatiles: ☒ X  
TCLP Semi-Volatiles: ☒ X  
Reactivity: ☒ X  
Corrosivity: ☒ X  
Ignitability: ☒ X

#### SECTION 9: Generator's Certification

The information contained herein is based on ☒ generator knowledge and/or ☒ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Melissa Saulsbury

Date: 4/29/08

Printed Name/Title: Melissa Saulsbury / Environmental Technician

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Robert A. Hargrave

Date: 8-15-08 Approved Rejected

Approval Number: 2929

**SECTION 10: Waste Receipt Classification Under 40 CFR 437**

Is this material a wastewater or wastewater sludge? ☐ YES ☒ NO

If 'Yes', complete this section.

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.**

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

- (1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.
- (2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

- (3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcategory

☐ Oils Subcategory

☐ Organics Subcategory

#### **SECTION 11: Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

Base Oil Material CES Pays 65 cents per gallon net oil of composite sample Must contain >60% oil for pay out  
Black Oil Material CES Pays 45 cents per gallon net oil of composite sample Must contain > 60% oil for pay out  
If >40 but <60 % oil no pay out. Less than 40% oil charge \$65.00 per tote  
Transportation \$70.00 per hour plus FSC

**2. Contamination Limits (maximum limit before surcharges apply):**

See Above ; Cannot be an emulsion.

**3. Surcharge Pricing:**

See Above

**4. Special Testing Requirements:**

Standard Oily Water testing ; Test water ; material cannot be an emulsion.

**5. Treatment and Handling Protocol:**

Clean Mineral oil to Base oil  
Combustion oil mixed or not mixed with mineral oil to black oil

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☒ Subcategory B

☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**7. Tests for Product Recovered/Recycled (if applicable):**

Standard
----------

**8. Management for Product Recovered/Recycled (if applicable):**

See Above
-----------

2930

Drilling Controls



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 8/18/2008

Dear Tim Grebe

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2930

**Expiration Date** 8/18/2010

**Generator:** Drilling Controls

**Address:** 8909 Jackrabbit Road  
Houston, TX 77095

### Waste Information

**Name of Waste:** non-hazardous wastewater

**TCEQ Waste Code #:** CESQ2191

**Container Type:**

**Detailed Description of Process Generating Waste:**

A 5% combined mixture of Oceanic EPF and Erifon systems cleaner and 95% water used to clean unused hydraulic oil out of a carbon steel tank.

**Color:** varies

**Odor:** none

**pH:** 3-9

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**  
level d

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000866

BP  
System processing  
Amine - cannot go  
to waste water.



CES Environmental  
Services, Inc.

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676

http://www.cesenvironmental.com

TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

DB

E-MAILED  
3/5 to Tim Grebe

SECTION 1: Generator Information

Company : Drilling Controls  
Address : 8909 Jackrabbit Road 8909 Jackrabbit Rd  
City, State, Zip : Houston TX 77095  
Contact : Tim Grebe Title :  
Phone No : (281) 656-3154 Fax : (281) 855-0319  
24 / HR Phone :  
U.S EPA I.D No : TXCESQG  
State I.D : CESQG SIC Code na

SECTION 2: Billing Information

Company : Drilling Controls  
Address : 8909 Jackrabbit Road 8909 Jackrabbit Rd  
City, State, Zip : Houston TX 77095  
Contact : Tim Grebe Title :  
Phone No : (281) 656-3154 Fax : (281) 855-0319

SECTION 3: General Description of the Waste

Name of Waste : Non-hazardous wastewater

Detailed Description of the Process Generating Waste:

A 5% combined mixture of Oceanic EPF and Erifon systems cleaner and 95% water used to clean unused hydraulic oil out of a carbon steel tank.

Physical State : ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color : varies Odor : NONE

Specific Gravity (Water=1) : 1-1.5 Density : 8.5 lbs / gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

2812 2813 2816 2819 2821 2822 2823 2824 2833 2834 2835 2836 2841 2842 2843 2844 2851  
2861 2865 2869 2873 2874 2876 2879 2891 2892 2893 2896 2899 2911 3312 4953 4959 9511

Layers : ☒ Single-Phase ☐ Multi-Phase

Container Type : ☐ Drum ☒ Tote ☐ Truck ☐ Other (explain)

Container Size : 250-500 gal

Number Of Units :

Is this a USEPA "Hazardous Waste" per 40 CFR 261.3? ☐ Yes ☒ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 ☐ D002 ☐ D003

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007  
☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristics for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☒ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code No : CE5Q2191

Proper U.S. State Waste Code No : non-RCRA/Non DOT regulated waste

Class : na UN/NA : na PG : na RQ : na

Flash Point >200	pH 3-9	Reactive Sulfides 0 mg/l	Reactive Cyanides 0 mg/l	Solids <u>NA</u> %
Oil and Grease <u>NA</u> mg/l	TOC 0 mg/l	Zinc 0 mg/l	Copper 0 mg/l	Nickel 0 mg/l

#### SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	Concentration	Units
The material / product consists of the following materials	Ranges are acceptable	or %
<u>diethanolamine</u> water	<u>5-10</u> <u>90-95</u>	<u>76</u> %

#### SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Level D

#### SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.

MSDS

#### SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

NONE

#### SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generators knowledge

TCLP Metals : ☒

TCLP Volatiles : ☒

TCLP Semi-Volatiles : ☒

Reactivity :   X    
Corrosivity :   X    
Ignitability :   X  

**SECTION 9: Waste Receipt Classification Under 40 CFR 437**

Is this material a wastewater or wastewater sludge ? ☒ YES ☒ NO

If 'YES', complete this section

**PLEASE CHECK THE APPROPRIATE BOX: IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE**

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☒ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation wastes
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesive and/or epoxies formulation

- ☐ Wastewater from organic chemical product operations  
☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcategory

☐ Oils Subcategory

☐ Organics Subcategory

#### SECTION 10: Additional Instruction

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

#### SECTION 11: Generator's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Tim Grebe

Date: 8/4/08

Printed Name / Title: Tim Grebe / HSE Mgr

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Process Facility Information:

Compliance Officer: Prabhakar Thangudu

Date: 8-18-08

Status:

Approved

Rejected

Approval Number:

2930



PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

30/gal - \$250 min  
Total - \$185.00

2. Contamination Limit (maximum limit before surcharges apply):

~~pH is Haz~~ Should conform to profile  
~~Flash < 140°~~

3. Surcharge Pricing:

None

4. Special Testing Requirements:

TOC, pH, metals, phenols, flash

5. Treatment and Handling Protocol:

High TOC - Forward to Newpark  
if low - Treat as class 1 waste water

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A

☒ Subcategory B

☐ Subcategory C



PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

N/A

8. Management for Product Recovered/Recycled (if applicable)

N/A

000110100  
MATERIAL SAFETY DATA SHEET

Page 1 of  
Revised 5/14/9

QUINTOLUBRIC® 807 BOP 4\*  
QUAKER CHEMICAL CORPORATION

Replaces 5/06/9  
Printed 7/24/9

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER:  
QUAKER CHEMICAL CORPORATION  
ELM STREET  
CONSHOHOCKEN, PA 19428-0809  
(610) 832-4000

EMERGENCY TELEPHONE NUMBERS:  
\* TRANSPORTATION:  
\*\* CHEMTREC: (800) 424-9300  
\* EMERGENCY HEALTH & SAFETY INFORMATION:  
\*\* QUAKER CHEMICAL CORP: (800) 523-701

2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS NO.	CHEMICAL NAME	PERCENT
111-42-2	DIETHANOLAMINE	5-10%

3. HAZARDS IDENTIFICATION

THRESHOLD LIMIT VALUE:  
0.46PPM IS THE TLV (SKIN) FOR DIETHANOLAMINE (ACGIH).

PRIMARY ROUTES OF ENTRY:  
INHALATION, SKIN CONTACT, EYE

EYE CONTACT:  
WILL CAUSE EYE IRRITATION.

SKIN CONTACT:  
WILL CAUSE SKIN IRRITATION.

INHALATION:  
INHALATION OF VAPOR OR MIST MAY PRODUCE RESPIRATORY IRRITATION.

EFFECTS OF OVEREXPOSURE:  
INGESTION: INGESTION MAY CAUSE NAUSEA, DIARRHEA AND STOMACH DISCOMFORT.

4. FIRST AID MEASURES

EYES: FLUSH PROMPTLY WITH COOL RUNNING WATER FOR  
AT LEAST 15 MINUTES. CALL A PHYSICIAN.

SKIN: WASH THOROUGHLY WITH SOAP AND WATER. CALL  
A PHYSICIAN, IF NECESSARY.

INGESTION: CALL A PHYSICIAN. NEVER GIVE ANYTHING  
BY MOUTH TO AN UNCONSCIOUS PERSON.

INHALATION: IF INHALED, REMOVE TO FRESH AIR. IF  
NOT BREATHING, GIVE ARTIFICIAL RESPIRATION,  
PREFERABLY MOUTH-TO-MOUTH. IF BREATHING IS

---

MATERIAL SAFETY DATA SHEET

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4. FIRST AID MEASURES (Cont.)

---

DIFFICULT, GIVE OXYGEN. CALL A PHYSICIAN.

---

5. FIRE FIGHTING MEASURES

---

FLASH POINT (METHOD USED): NA BOILS >212 F.

FLAMMABLE LIMITS: ND LOWER: ND UPPER: ND

EXTINGUISHING MEDIA:  
CO2, FOAM, DRY CHEMICAL.

SPECIAL FIRE FIGHTING PROCEDURES:  
WEAR NIOSH/MSHA APPROVED SELF CONTAINED BREATHING APPARATUS (SCBA).

UNUSUAL FIRE AND EXPLOSION HAZARDS:  
NONE

---

6. ACCIDENTAL RELEASE MEASURES

---

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:  
DILUTE WITH LARGE VOLUMES OF WATER; NEUTRALIZE WITH MILD ACID. WASH AREA WITH MILD DETERGENT AND WATER.

ENVIRONMENTAL IMPACT:  
NOT DETERMINED

---

7. HANDLING AND STORAGE

---

STORAGE TEMPERATURE (MIN./MAX.):  
40 F./110 F.

SHELF LIFE:  
9 MONTHS

SPECIAL SENSITIVITY:  
NOT DETERMINED

HANDLING AND STORAGE PRECAUTIONS:  
DO NOT GET IN EYES, ON SKIN OR ON CLOTHING.  
DO NOT TAKE INTERNALLY. WASH THOROUGHLY  
AFTER HANDLING.

OTHER PRECAUTIONS:  
NONE.

---

MATERIAL SAFETY DATA SHEET

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

---

EYE PROTECTION:  
WEAR SAFETY GOGGLES.

PROTECTIVE GLOVES:  
RECOMMENDED

RESPIRATORY PROTECTION:  
FOR FIRE CONDITIONS OR EXPOSURE ABOVE TLV: WEAR NIOSH/MSHA APPROVED  
RESPIRATORS.

VENTILATION REQUIREMENTS:  
LOCAL EXHAUST IS RECOMMENDED.

OTHER PROTECTIVE EQUIPMENT:  
EYE WASH FACILITY AND SAFETY SHOWER RECOMMENDED.

---

9. PHYSICAL AND CHEMICAL PROPERTIES

---

BOILING/MELTING POINT:  
> 212 F.

SPECIFIC GRAVITY (H2O=1):  
..005 @ 60 F.

VAPOR DENSITY (AIR=1)  
ND

VAPOR PRESSURE:  
ND

PERCENT VOLATILE BY VOLUME (%):  
ND

PERCENT SOLID BY WEIGHT:  
ND

EVAPORATION:  
ND

SOLUBILITY IN WATER:  
COMPLETELY

PH:  
9.1-10.1 @ 3.0%

APPEARANCE AND ODOR:  
CLEAR, GREEN AMBER FLUID; MILD ODOR.

VLATILE ORGANIC COMPOUND (VOC):

---

MATERIAL SAFETY DATA SHEET

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9. PHYSICAL AND CHEMICAL PROPERTIES (Cont.)

---

NOT DETERMINED

---

10. STABILITY AND REACTIVITY

---

STABILITY:  
STABLE.

CONDITIONS CONTRIBUTING TO INSTABILITY:  
NONE.

HAZARDOUS POLYMERIZATION:  
WILL NOT OCCUR.

INCOMPATIBILITY:  
STRONG ACIDS, STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:  
(THERMAL) NONE.

---

11. TOXICOLOGICAL INFORMATION

---

THIS PRODUCT DOES NOT CONTAIN ANY MATERIAL SHOWN TO BE A CARCINOGEN BY THE NATIONAL TOXICOLOGY PROGRAM (NTP), THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) OR OSHA.

THIS PRODUCT CONTAINS DIETHANOLAMINE. THIS MATERIAL HAS BEEN SHOWN TO CAUSE DELAYED KIDNEY AND LIVER DAMAGE WITH REPEATED PROLONGED OVEREXPOSURES IN LABORATORY TESTING WITH ANIMALS. THESE EFFECTS WERE GENERALLY SEEN IN FEEDING OR DRINKING WATER STUDIES; HOWEVER, THERE WAS AT LEAST ONE POSITIVE FINDING IN STUDIES OF DERMAL ABSORPTION. THE RELEVANCE OF ANIMAL TEST DATA TO DETERMINATIONS ABOUT THE HAZARDOUS NATURE TO HUMANS IS UNKNOWN AT THIS TIME. AS WITH ANY INDUSTRIAL PRODUCT, THE PRACTICE OF GOOD PERSONAL HYGIENE IS RECOMMENDED WHERE PROLONGED CONTACT IS ANTICIPATED. IN ADDITION, THE PERSONAL PROTECTIVE EQUIPMENT (PPE) RECOMMENDED SHOULD ALWAYS BE WORN. EXPOSURES TO MISTS, AEROSOLS, OR FUMES SHOULD BE MINIMIZED.

PRELIMINARY FINDINGS FROM THE NATIONAL TOXICOLOGY PROGRAM SUGGEST AN INCREASED INCIDENCE OF LIVER TUMORS IN MICE DERMALLY EXPOSED FOR THEIR LIFETIME TO DIETHANOLAMINE. THE SIGNIFICANCE OF THESE FINDINGS AND THEIR RELEVANCE TO HUMANS ARE NOT CLEAR AS DIETHANOLAMINE WAS NOT GENOTOXIC (NEITHER MUTAGENIC OR CLASTOGENIC), AND DID NOT INDUCE TUMORS IN RATS OR IN TRANSGENIC MICE SIMILARLY TREATED. ADDITIONAL RESEARCH WHICH IS DESIGNED TO PROVIDE A BETTER UNDERSTANDING OF THE SIGNIFICANCE OF THESE OBSERVATIONS TO HUMANS, IF ANY, IS UNDERWAY.

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MATERIAL SAFETY DATA SHEET

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12. ECOLOGICAL INFORMATION

---

NO DATA AVAILABLE.

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13. DISPOSAL CONSIDERATIONS

---

WASTE DISPOSAL METHOD:

DILUTE WITH LARGE VOLUMES OF WATER; NEUTRALIZE WITH MILD ACID. DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL EPA REGULATIONS.

---

14. TRANSPORT INFORMATION

---

U.S. DEPARTMENT OF TRANSPORTATION

PROPER SHIPPING NAME:

ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (CONTAINS DIETHANOLAMINE), 9, UN 3082, PG III.

THIS IS FOR BULK SHIPMENTS ONLY! (UNLESS INDICATED ON BILL OF LADING OR ON DRUM WITH THE CLASS 9 LABEL.)

D.O.T. HAZARD CLASS:

CLASS 9

UN/NA ID NUMBER:

UN 3082

EMERGENCY RESPONSE GUIDE NUMBER:

ERG # 171

---

15. REGULATORY INFORMATION

---

TOXIC SUBSTANCES CONTROL ACT (TSCA):

THIS PRODUCT AND/OR ALL THE INGREDIENTS CONTAINED IN THIS PRODUCT HAVE BEEN REGISTERED UNDER THE TOXIC SUBSTANCES CONTROL ACT.

R.C.R.A.:

THIS PRODUCT DOES NOT MEET THE DEFINITIONS OR CONTAIN ANY SUBSTANCE APPEARING IN THE LISTINGS CONTAINED IN 40CFR261, "IDENTIFICATION AND LISTING OF HAZARDOUS WASTE."

THIS PRODUCT CONTAINS DIETHANOLAMINE WHICH IS SUBJECT TO THE ANNUAL REPORTING REQUIREMENTS UNDER SECTION 313 OF SARA, TITLE III. CONTACT THE EPA FOR INFORMATION REGARDING THE REPORTING REQUIREMENTS.

THIS PRODUCT HAS BEEN REVIEWED IN ACCORDANCE WITH SECTIONS 311 (MSDS INVENTORY) AND SECTION 312 (TIER I/II INVENTORY) OF THE SUPERFUND AMENDMENT AND REAUTHORIZATION ACT OF 1986 (CFR 40 370.2) FOR "HAZARD CATEGORY" STATUS UNDER APPLICABLE DEFINITIONS, THIS PRODUCT MEETS THE FOLLOWING CATEGORIES:

---

MATERIAL SAFETY DATA SHEET

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15. REGULATORY INFORMATION (Cont.)

---

IMMEDIATE (ACUTE) HEALTH HAZARD AND DELAYED (CHRONIC) HEALTH HAZARD.

THIS PRODUCT DOES NOT CONTAIN OR WAS NOT MANUFACTURED WITH ANY OF THE EPA CLASS I OR CLASS II OZONE DEPLETING SUBSTANCES.

TRADE SECRET CLAIM IS MADE IN ACCORDANCE WITH SECTION 317.2 OF THE PENNSYLVANIA WORKER AND COMMUNITY RIGHT-TO-KNOW ACT (TITLE 34).

---

16. OTHER INFORMATION

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THE INFORMATION CONTAINED IN THIS MATERIAL SAFETY DATA SHEET IS BASED ON THE NEAT OR CONCENTRATED PRODUCT AS SHIPPED.

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM RATING (HMIS)

HEALTH\* 2

FLAMMABILITY 0

REACTIVITY 0

PERSONAL PROTECTION B

\*PERSONAL PROTECTION RECOMMENDATIONS SHOULD BE REVIEWED BY PURCHASERS. WORKPLACE CONDITIONS ARE IMPORTANT FACTORS IN SPECIFYING ADEQUATE PROTECTION.

REASON FOR ISSUE ....: UPDATED HMIS RATING  
PREPARED BY .....: MICHAEL RUSSO  
TITLE .....: REGULATORY & ENVIRONMENTAL AFFAIRS SPECIALIST  
APPROVAL DATE .....: MAY 6, 1998  
PRODUCT NUMBER .....: E-11989

THIS PRODUCT'S SAFETY INFORMATION IS PROVIDED TO ASSIST OUR CUSTOMERS IN ASSESSING COMPLIANCE WITH HEALTH/SAFETY/ENVIRONMENTAL REGULATIONS. THE INFORMATION CONTAINED HEREIN IS BASED ON DATA AVAILABLE TO US AND IS BELIEVED TO BE ACCURATE. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY USE, OR ANY OTHER WARRANTY IS EXPRESSED OR TO BE IMPLIED, REGARDING THE ACCURACY OF THESE DATA, THE RESULTS TO BE OBTAINED FROM THE USE THEREOF, OR THE HAZARDS CONNECTED WITH THE USE OF THE PRODUCT. SINCE THE USE OF THIS PRODUCT IS WITHIN THE EXCLUSIVE CONTROL OF THE USER, IT IS THE USER'S OBLIGATION TO DETERMINE THE CONDITIONS OF SAFE USE OF THE PRODUCT. SUCH CONDITIONS SHOULD COMPLY WITH ALL FEDERAL REGULATIONS CONCERNING THE PRODUCT. QUAKER CHEMICAL CORPORATION ASSUMES NO LIABILITY FOR ANY INJURY OR DAMAGE, DIRECT OR CONSEQUENTIAL, RESULTING FROM THE USE OF THIS PRODUCT UNLESS SUCH INJURY OR DAMAGE IS ATTRIBUTABLE TO NEGLIGENCE ON THE PART OF QUAKER CHEMICAL CORPORATION.

NA = NOT APPLICABLE, ND = NOT DETERMINED, < = LESS THAN, > = GREATER THAN

**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

\$65/dm

**2. Contamination Limits (maximum limit before surcharges apply):**

None, Non conforming to profile

**3. Surcharge Pricing:**

None

**4. Special Testing Requirements:**

Flash , pH

**5. Treatment and Handling Protocol:**

Class 1 liquids or sludge depending on consistency ; Avoid contaminating wastewater ; process material to system if it is a liquid and the flash & pH are OK.

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☐ Subcategory B

☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**7. Tests for Product Recovered/Recycled (if applicable):**

Na
----

**8. Management for Product Recovered/Recycled (if applicable):**

Na
----

2931

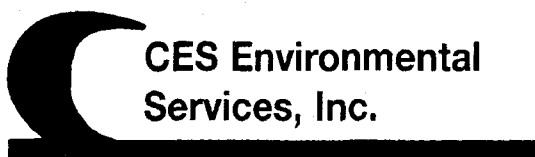
Hitemco South West - Lozano

79

8-4-09

LAB

T-35



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 8/18/2008

Dear John Winne

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2931

**Expiration Date** 8/18/2010

**Generator:** Hitemco Southwest-Lozano

**Address:** 6421 Lozano  
Houston, TX 77041

### Waste Information

**Name of Waste:** carbide dust and filters

**TCEQ Waste Code #:** CESQ3192

**Container Type:**

**Detailed Description of Process Generating Waste:**

collection of carbide dust through filter system

**Color:** white to grey

**Odor:** none

**pH:** neutral

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**

level c- use respiratory protection

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000883

*DR*  
*There can be no free liquids.*



CES Environmental  
Services, Inc.

*22*

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
http://www.cesenvironmental.com  
TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

**SECTION 1: Generator Information**

Company: Hitemco Southwest  
Address: 6421 Lozano  
City, State, Zip: Houston, TX 77041  
Contact: John Winne Title: Sr. Development Engineer  
Phone No: 713-466-9655 Fax No: 713-466-1762  
24/hr Phone: CES 713-676-1460  
U.S. EPA I.D. No: CESQG  
State I.D. CESQG SIC Code:

**SECTION 2: Billing Information - ☒ Same as Above**

Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Contact: \_\_\_\_\_ Title: \_\_\_\_\_  
Phone No: \_\_\_\_\_ Fax No: \_\_\_\_\_

**SECTION 3: General Description of the Waste**

Name of Waste: Carbide Dust and Filters

Detailed Description of Process Generating Waste: Collection of carbide dust through filter system

Physical State: ☐ Liquid ☐ Sludge ☐ Powder  
☒ Solid ☐ Filter Cake ☐ Combination

Color: White to Grey

Odor: none

Specific Gravity (water=1): 1.4

Density: 10 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☒ Other (explain)  
Container Size: 55 gal Tote with sack

Frequency: ☐ Weekly ☐ Monthly ☒ Quarterly ☐ Yearly

Number of Units (containers): 3-5

Other: \_\_\_\_\_

Texas State Waste Code No: CESQ3192

Proper U.S. DOT Shipping Name: Non-RCRA; Non-DOT Regulated Material

Class: NA UN/NA: NA PG: NA RQ: NA

Flash Point <u>none</u>	pH <u>neutral</u>	Reactive Sulfides <u>0mg/l</u>	Reactive Cyanides <u>0mg/l</u>	Solids <u>100%</u>
Oil & Grease <u>&lt;1500mg/l</u>	TOC <u>&lt;1500mg/l</u>	Zinc <u>          </u> mg/l	Copper <u>&gt;100mg/l</u>	Nickel <u>&gt;50mg/l</u>

#### SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	Concentration	Units
The waste consists of the following materials	Ranges are acceptable	or %
Metal Oxides (Al, Ti, Fe, Zr, Y)	80-90	%
Silica Dioxide	1-3	%
Nickel	0-1	%
Cobalt	0-3	%
Chromium (non-leachable)	0-1	%
Paper Filter Element	20-50	%

#### SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Level C-Use Respiratory Protection

#### SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.

Analysis-MES Report 8070234

#### SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

none

#### SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: \_\_\_\_\_  
TCLP Volatiles: X  
TCLP Semi-Volatiles: X  
Reactivity: \_\_\_\_\_  
Corrosivity: \_\_\_\_\_  
Ignitability: \_\_\_\_\_

#### SECTION 9: Generator's Certification

The information contained herein is based on ☒ generator knowledge and/or ☒ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_

Date: 8/8/08

Printed Name/Title: \_\_\_\_\_

TORRES WILSON, DR. EMILY DEU

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Rabindra Thangaraj

Date: 8-18-08

Approved

Rejected

Approval Number: 2931

**SECTION 10: Waste Receipt Classification Under 40 CFR 437**

Is this material a wastewater or wastewater sludge? ☐ YES ☒ NO

If 'Yes', complete this section.

***PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.***

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

- (1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.
- (2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

- (3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

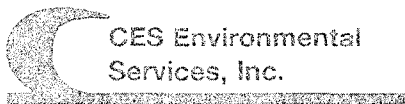
☐ Metals Subcategory

☐ Oils Subcategory

☐ Organics Subcategory

#### **SECTION 11: Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

1. **Base Pricing (including freight):**

Drum: \$50.00 each      Tote (Bag): \$100.00  
Transportation \$200.00 Trip Fee plus FSC

2. **Contamination Limits (maximum limit before surcharges apply):**

NA , There cannot be any free liquids

3. **Surcharge Pricing:**

NA

4. **Special Testing Requirements:**

NA ; No Free liquids

5. **Treatment and Handling Protocol:**

Class II Solids or HPP Recycling

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☐ Subcategory B

☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**7. Tests for Product Recovered/Recycled (if applicable):**

NA

**8. Management for Product Recovered/Recycled (if applicable):**

NA

# Mercury Environmental Services, Inc.

6913 HWY 225, Deer Park, TX 77536  
Phone: (281)-476-4534 Fax: (281)-476-4406

CES Environmental Services  
4904 Griggs Rd  
Houston, TX 77021

Phone: 7134175737  
Fax: (713) 616-1676

Attn: Gary Brauckman

## - CERTIFICATE OF RESULTS -

MES Lab#: 8070234

Client Sample ID: Carbide Dust

Project#: Hitemco-co-zamo

Extended ID: PO# 0708-30 Project Name: Hitemco-cozamo-curbiside

Sample Collect Date: 7/10/2008 @ 10:00:00 AM

Sample Type: Grab

Sample Receipt Date: 7/11/2008 @ 4:13:00 PM

### Test Group / Method

TCLP Metals (11)						Analyst: JCA
Method: SW-846 6010B		MDL	RL	Result	Units	Date / Time
Antimony	0.032	1		< 0.032	mg/L	7/30/2008 / 6:39 PM
Arsenic	0.014	5		< 0.014	mg/L	7/30/2008 / 6:39 PM
Barium	0.0005	100		0.0790	mg/L	7/30/2008 / 6:39 PM
Beryllium	0.0005	0.08		< 0.0005	mg/L	7/30/2008 / 6:39 PM
Cadmium	0.002	1		< 0.002	mg/L	7/30/2008 / 6:39 PM
Chromium	0.002	5		< 0.002	mg/L	7/30/2008 / 6:39 PM
Lead	0.005	5		< 0.005	mg/l	7/30/2008 / 6:39 PM
Nickel	0.003	70		0.179	mg/L	7/30/2008 / 6:39 PM
Selenium	0.024	1		< 0.024	mg/L	7/30/2008 / 6:39 PM
Silver	0.002	5		< 0.002	mg/L	7/30/2008 / 6:39 PM
TCLP Mercury						Analyst: JCA
Method: SW-846 7470A		MDL	RL	Result	Units	Date / Time
Mercury	0.0002	0.2		< 0.0002	mg/L	7/30/2008 / 2:00 PM
Reactivity, Recoverable Hydrogen Cyanide						Analyst: CL
Method: 7.3.3.2		MDL		Result	Units	Date / Time
Hydrogen Cyanide	0.25			< 0.25	mg/kg	7/22/2008 / 3:30 PM
Reactivity, Recoverable Hydrogen Sulfide						Analyst: CL
Method: 7.3.4.2		MDL		Result	Units	Date / Time
Hydrogen Sulfide	0.25			< 0.25	mg/kg	7/22/2008 / 9:00 AM
Corrosivity: pH						Analyst: JE
Method: SW-846 9045		MDL		Result	Units	Date / Time
pH				8.43		7/15/2008 / 2:25 PM

Report Date: 05-Aug-08

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**- CERTIFICATE OF RESULTS -**

MES Lab#: 8070234

Client Sample ID: Carbide Dust

Project#: Hitemco-co-zamo

Extended ID: PO# 0708-30 Project Name: Hitemco-cozamo-curbside


Sample Collect Date: 7/10/2008 @ 10:00:00 AM

Sample Type: Grab

Sample Receipt Date: 7/14/2008 @ 4:13:00 PM

Ignitability				Analyst: DEB
Method: SW-846 1010	MDL	Result	Units	Date / Time
Flashpoint		>150	deg F	7/17/2008 / 1:30 PM
Result is > 150				
Total Petroleum Hydrocarbons Solid				Analyst: HDG
Method: INRCC 1005	MDL	Result	Units	Date / Time
C6 - C12 Hydrocarbons	4	< 4	mg/kg	7/20/2008 / 2:52 PM
>C12 - C28 Hydrocarbons	8	44	mg/kg	7/20/2008 / 2:52 PM
>C28 - C36 Hydrocarbons	8	148	mg/kg	7/20/2008 / 2:52 PM
Total TPH	20	192	mg/kg	7/20/2008 / 2:52 PM

Flags: H: Exceeds "High Limit" L: Below "Low Limit" RL=regulatory limit

  
John Keller, Ph.D., Lab Director

Tuesday, August 05, 2008

Date

Report Date: 05-Aug-08

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8070234

**MERCURY ENVIRONMENTAL SERVICES  
QA/QC REPORT**

ANALYTE	MB mg/L	LCS %REC	LCSD %REC	RPD	CCB mg/L	CCV %REC	MS %REC	MSD %REC	RPD
Antimony	< 0.005	107.5	111	3.32	< 0.005	105	81.2	83.6	2.9
Arsenic	< 0.002	94	94	0.7	< 0.002	91	76.4	77.2	1.04
Barium	< 0.002	105.0	105	0.43	< 0.002	101	65.2	67.7	3.8
Beryllium	< 0.002	109.6	110	0.73	< 0.002	107	82.1	84.6	3.1
Cadmium	< 0.001	109.4	110.9	1.32	< 0.001	107	70.9	72.0	1.5
Chromium	< 0.001	109	107	2.50	< 0.001	103	70.0	72.2	3.0
Lead	< 0.002	106.1	109.2	2.90	< 0.002	107	67.7	71.9	6.1
Mercury	< 0.0002	101.0	97.5	3.53	< 0.0002	102.0			
Nickel	< 0.001	105	106	1.66	< 0.001	104	69.3	74.9	7.7
Selenium	< 0.024	108.1	91.4	16.7	< 0.024	87	64.9	61.8	5.0
Silver	< 0.001	110	109	0.91	< 0.001	104	73.4	75.6	3.06

ANALYTES	METHOD TPH1005	MB mg/kg	CCV %REC	MS %REC	MSD %REC
C6-C12		< 4	94	108	98
C12-C28		< 8	93	97	93

ANALYTE	STD
Flashpoint	82°F

ANALYTE	BUFFER 7.0	ORIG	DUP	RPD
pH	7.0	6.20	6.23	0.48

ANALYTE	ORIG mg/kg	DUP mg/kg	RPD
Reactivity as Hydrogen Sulfide	< 0.25	< 0.25	0.00

ANALYTE	ORIG mg/kg	DUP mg/kg	RPD	STD %REC
Reactivity as Hydrogen Cyanide	< 0.25	< 0.25	0.00	110

Mercury Environmental Services, Inc.

8070234

**MERCURY ENVIRONMENTAL SERVICES  
QA/QC REPORT**

**Key to QA Abbreviations**

MS=Matrix Spike

RPD=Relative Percent Deviation

LCS=Laboratory Control Standard

CCB=Continuing Calibration Blank

MDL=Minimum Detection Limit

MSD=Matrix Spike Duplicate

MB=Method Blank

CCV=Continuing Calibration Verification

%Rec=Percent Recovery

RL=Regulatory Limit

Signature: \_\_\_\_\_

*John Keller*  
John Keller / Laboratory Director

August 4, 2008

Mercury Environmental Services, Inc.

**WHITE - Returned with Report**

2895  
El Paso Energy

✓



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/22/2008

Dear Zac or Dave

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2895

**Expiration Date** 7/22/2010

**Generator:** El Paso Energy

**Address:** 1001 Louisiana #T-3180  
Houston, TX 77002

### Waste Information

**Name of Waste:** Totaline POE68 refrigeration lubricant

**TCEQ Waste Code #:** CESQ2191

**Container Type:**

**Detailed Description of Process Generating Waste:**  
maintenance in control room

**Color:** clear

**Odor:** none

**pH:** 6-9

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**  
level d ppe

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.



4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

**SECTION 1: Generator Information**

Company: EL PASO ENERGY  
Address: 1001 LOUISIANA #T-3180  
City: HOUSTON State: TX Zip: 77002  
Contact: JEFF FRENCH Title: MAINT. MANAGER  
Phone Number: 713-420-4027 Fax Number: \_\_\_\_\_  
24/hr Phone Number: 800-468-1760  
US EPA ID No: TXD987990041  
State ID No: CESQG SIC Code: \_\_\_\_\_

**SECTION 2: Billing Information -** ☐ Same as Above

Company: CKG SERVICES  
Address: 10707 HONEA EGYPT ROAD  
City: MONTGOMERY State: TX Zip: 77316  
Contact: ZAC MCKAUGHAN Title: PRESIDENT  
Phone Number: 936-483-3662 Fax Number: 936-756-1226

**SECTION 3: General Description of the Waste**

Name of Waste: TOTALINE POE68 REFRIGERATION LUBRICANT  
Detailed Description of Process Generating Waste: MAINTENANCE IN CONTROL ROOM

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: CLEAR Odor: NONE

Specific Gravity (water=1): 0.98 Density: 8 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☒ Other (explain)

Frequency: ☐ Weekly ☒ Monthly ☐ Yearly ☐ One-Time

Quantity: \_\_\_\_\_

Is this a USEPA "Hazardous Waste" per 40CFR 261.3?

☐ Yes ☒ No

If "Yes", then please fill out the UHC Form

If "Yes", is it:

☐ D001 (Ignitable)

☐ D002 (Corrosive)

☐ D003 (Reactive)

Characteristic for Toxic Metals:

☐ D004

☐ D005

☐ D006

☐ D007

☐ D008

☐ D009

☐ D010

☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one?

☐ Yes ☒ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)?

☐ Yes ☒ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number:

CESQZ191

Proper US DOT Shipping Name:

NON REGULATED/NON DOT/NON HAZ

Class: NA UN/NA:

NA

PG:

NA

RQ:

NA

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
-------------	----	-------------------	-------------------	--------

Flash Point >200	pH 6-9	N/A	N/A	Solids %
Oil & Grease N/mg/l	TOC 2-3000mg/l	Zinc N/mg/l	Copper N/mg/l	Nickel N/mg/l

#### SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	Concentration	Units
The material / product consists of the following materials	Ranges are acceptable	or %
Totaline P22 68 Refrigeration Lubricant	100	%

#### SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.

Level D PPE

#### SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.

MSDS sheets, generator knowledge

#### SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

None

#### SECTION 8: Material Producer's Certification

The information contained herein is based on ☒ generator knowledge and/or ☒ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_

Date: 07/10/08

Printed Name/Title: See next Page

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: _____	
Date: _____ Approved Rejected	
Approval Number: _____	

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

NONE

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

None Known

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	0
TCLP Volatiles:	0
TCLP Semi-Volatiles:	0
Reactivity:	0
Corrosivity:	0
Ignitability:	0

**SECTION 9: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_

Date: 7-15-08

Printed Name/Title: \_\_\_\_\_

ZAC MCKAUGHAN / PRESIDENT

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: [Signature]

Date: 7-22-08

☒ Approved

☐ Rejected

Approval Number: 2895



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

\$65/DM

**2. Contamination Limits (maximum limit before surcharges apply):**

None

**3. Surcharge Pricing:**

NA

**4. Special Testing Requirements:**

Make sure product fits MSDS - *density, water solubility, compatibility w/ black oil,*

**5. Treatment and Handling Protocol:**

Class 1 Liquids or Sludge box depending on consistency ; *process to black oil.*

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☐ Subcategory B

☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**7. Tests for Product Recovered/Recycled (if applicable):**

Na

**8. Management for Product Recovered/Recycled (if applicable):**

Na

JUL/C9/2008/WED 02:30 PM

El Paso Energy

P. 001

Totaline® POE88 Refrigeration Lubricant P903-1001, P903-1005, P903-1025, P903-1001S, P903-1025S Page 1 of 2

**MATERIAL SAFETY DATA SHEET****SECTION 1 CHEMICAL PRODUCT AND COMPANY INFORMATION**

Product Name: Totaline® POE88 Refrigeration Lubricant  
 Product Number(s): P903-1001, P903-1005, P903-1025, P903-1001S, P903-1025S  
 Product Use: Polyol Ester Compressor Lubricant

Date Prepared Apr. 03, 2008  
 Replaces Mar. 29, 2004

Company Name: North American Research Corporation  
 P.O. Box 1318  
 Lewisville, TX 75087

Telephone Numbers: (872) 492-1800, (800) 627-7520, Fax (872) 394-8765  
 Emergencies: Infotrac (800) 535-5053 (24 hours, everyday)

**SECTION 2 COMPOSITION / INFORMATION ON INGREDIENTS**

CAS Registry No.	OSHA PEL	ACGIH TLV	Other Limits	% (Optional)
---------------------	----------	-----------	-----------------	-----------------

Contains no hazardous ingredients as defined by OSHA 29 CFR 1910.1200

**SECTION 3 HAZARDS IDENTIFICATION**

EMERGENCY OVERVIEW: Clear, colorless liquid. Slight petroleum odor.

**POTENTIAL HEALTH EFFECTS**

INHALATION: Under normal use conditions, this product is not an inhalation hazard.

SKIN: May cause irritation on repeated or prolonged contact.

EYES: Minor irritant. Avoid contact as good industrial practice.

INGESTION: May cause nausea. Not expected to be acutely toxic by ingestion.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

CHRONIC EFFECTS: None known.

**SECTION 4 FIRST AID MEASURES**

INHALATION: Not likely to occur except as mist. Remove patient to fresh air and consult a physician. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.

SKIN: Remove contaminated clothing and shoes. Thoroughly wash contact area with soap and water. Get medical attention if irritation or rash develops. Wash clothing before reuse.

EYES: Immediately flush eyes with large amounts of water for at least 15 minutes while frequently lifting the upper and lower eyelids. If irritation persists, call a physician.

INGESTION: Product is practically non-toxic. DO NOT induce vomiting. Contact a physician or emergency medical facility immediately.

**SECTION 5 FIRE-FIGHTING MEASURES**

FLASHPOINT: >464°F (240°C) METHOD: COC LEL: Not determined UEL: Not determined

AUTOIGNITION TEMP: Not determined

EXTINGUISHING MEDIA: Dry chemical, carbon dioxide, water fog and foam. NOTE: Water fog and foam may cause frothing and spattering.

HAZARDOUS COMBUSTION PRODUCTS: Fumes, smoke, and carbon monoxide.

**FIRE FIGHTING INSTRUCTIONS**

Use flooding quantities of water as fog or spray to keep fire-exposed containers cool. Firefighters should wear self-contained breathing apparatus.

**SECTION 6 ACCIDENTAL RELEASE MEASURES**

Large spills: Wear appropriate protective clothing. Stop source of leak if possible. Contain spill and keep from entering waterways or sewers. Absorb with inert material. Shovel, sweep, or vacuum spill.

Small Spills: Soak up with inert absorbent or wipe up with rags and dispose of properly.

**SECTION 7 STORAGE AND HANDLING****STORAGE CONDITIONS:**

Store in labeled, sealed containers in a cool, dry, well-ventilated area. Keep containers tightly closed until time of use. Refrigeration lubricants are hygroscopic and will absorb moisture from the air. Do not reuse containers. Do not remove or deface label.

**HANDLING PROCEDURES:**

Wash hands before eating, drinking, or using the restroom. Any clothing or shoes which become contaminated should be removed immediately and thoroughly washed before wearing again.

**SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**

**EXPOSURE LIMITS:** None established. 5 mg/m<sup>3</sup> generally recommended for oil mist

**RESPIRATORY PROTECTION:** Normally not required. If used where mist may occur at high levels, use NIOSH/MSHA approved apparatus.

**EYE PROTECTION:** Wear safety glasses. Have suitable eyewash water available.

**SKIN PROTECTION:** Avoid prolonged and/or repeated contact. If prolonged contact cannot be avoided, wear protective impervious gloves and clothing. Acceptable materials for gloves are PVC, Neoprene, Nitrile, Polyvinyl Alcohol, or Viton.

**ENGINEERING CONTROLS (Ventilation):** Use adequate ventilation to keep oil mist below 5 mg/m<sup>3</sup>.

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE AND ODOR:** Clear, colorless liquid; light bland petroleum odor.

**SPECIFIC GRAVITY:** 0.88

**MOLECULAR WEIGHT:** Not determined

**VAPOR DENSITY:** >5 (Air = 1)

**pH:** Not applicable

**VISCOSITY:** 68 cSt @ 40°C

**VAPOR PRESSURE:** Negligible

**MELTING POINT:** Not determined

**SOLUBILITY IN WATER:** Insoluble

**BOILING POINT:** >600°F (260°C)

**VOLATILES, % BY VOLUME:** nil

**SECTION 10 STABILITY AND REACTIVITY**

**STABILITY:** Stable

**CONDITIONS TO AVOID:** Ignition sources (sparks, open flame, heated surfaces).

**INCOMPATIBILITY (Materials to Avoid):** Strong oxidizers.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Combustion may produce carbon monoxide and other asphyxiants.

**SECTION 11 TOXICOLOGICAL INFORMATION**

**ACUTE TOXICITY:** Minimal irritation on contact.

**CHRONIC TOXICITY:** This product has not been found to be carcinogenic or a potential carcinogen. It is not listed by NTP, IARC, OSHA, or ACGIH. Nevertheless, good industrial hygienic practices are recommended.

**SECTION 12 ECOLOGICAL INFORMATION**

No specific data are available.

**SECTION 13 DISPOSAL CONSIDERATIONS**

Dispose of in accordance with federal, state, and local regulations. Not an RCRA hazardous waste if uncontaminated. If used, RCRA criteria must be determined.

**SECTION 14 TRANSPORT INFORMATION**

U.S. Department of Transportation:

Not regulated

**SECTION 15 REGULATORY INFORMATION**

**TSCA:** All components of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

**CERCLA:** No reportable ingredients

**SARA TITLE III:**

Section 311/312 Hazard Category: Acute: No

Chronic: No

Fire: No

Pressure: No

Reactive Hazard: No

Section 313 Reportable Ingredients: None

**CALIFORNIA (Proposition 65):** No reportable ingredients.

**SECTION 16 OTHER INFORMATION**

**NFPA RATING:** Health - 1, Flammability - 1, Reactivity - 0

**HMIS® RATING:** Health - 1, Flammability - 1, Reactivity - 0

HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint and Coatings Association (NPCA).

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of North American Research Corporation. The data on this sheet are related only to the specific material designated herein. North American Research Corporation assumes no legal responsibility for use or reliance upon these data.

2896  
El Paso Energy



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/22/2008

Dear Zac or Dave

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2896

**Expiration Date** 7/22/2010

**Generator:** El Paso Energy

**Address:** 1001 Louisiana #T-3180  
Houston, TX 77002

### Waste Information

**Name of Waste:** B.M. Acrylic primer

**TCEQ Waste Code #:** CESQ2191

**Container Type:**

**Detailed Description of Process Generating Waste:**

general maintenance

**Color:** na

**Odor:** none

**pH:** na

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

SRP  
OK



DB

4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

**SECTION 1: Generator Information**

Company: EL PASO ENERGY  
Address: 1001 LOUISIANA #T-3180  
City: HOUSTON State: TX Zip: 77002  
Contact: JEFF FRENCH Title: MAINT. MANAGER  
Phone Number: 713-420-4027 Fax Number: \_\_\_\_\_  
24/hr Phone Number: 800-468-1760  
US EPA ID No: TXD987990041  
State ID No: CESQG SIC Code: \_\_\_\_\_

**SECTION 2: Billing Information -** ☐ Same as Above

Company: CKG SERVICES  
Address: 10707 HONEA EGYPT ROAD  
City: MONTGOMERY State: TX Zip: 77316  
Contact: ZAC MCKAUGHAN Title: PRESIDENT  
Phone Number: 936-483-3662 Fax Number: 936-756-1226

**SECTION 3: General Description of the Waste**

Name of Waste: B.M. ACRYLIC PRIMER  
Detailed Description of Process Generating Waste: GENERAL MAINTENANCE

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: NA Odor: NONE

Specific Gravity (water=1): NA Density: NA lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☒ Monthly ☐ Yearly ☐ One-Time

Quantity: FIVE



**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

NONE *SD*

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

None Known

**SECTION 8: Generator's Knowledge Documentation**

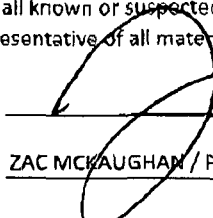
Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	0
TCLP Volatiles:	0
TCLP Semi-Volatiles:	0
Reactivity:	0
Corrosivity:	0
Ignitability:	0

**SECTION 9: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: 

Date: 7/14/2008

Printed Name/Title: ZAC MCKAUGHAN / PRESIDENT

CE5 USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: 

Date: 7-22-08

☒ Approved

☐ Rejected

Approval Number:

2896



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

\$65/DM

**2. Contamination Limits (maximum limit before surcharges apply):**

None

**3. Surcharge Pricing:**

NA

**4. Special Testing Requirements:**

Make sure product fits MSDS

**5. Treatment and Handling Protocol:**

Class 1 Liquids or Sludge box depending on consistency

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☐ Subcategory B

☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**7. Tests for Product Recovered/Recycled (if applicable):**

Na
----

**8. Management for Product Recovered/Recycled (if applicable):**

Na
----

M A T E R I A L   S A F E T Y   D A T A   S H E E T   Rev. 05B  
For Coating, Resins, and Related Materials NPCA 1-84  
Manufacturer's Name                      Emergency Telephone No.  
BENJAMIN MOORE & CO.                      800-424-9300 (CHEMTREC)  
51 CHESTNUT RIDGE RD  
MONTVALE, NJ 07645

Date Prepared   Last Rev Date   Information Telephone No.  
10-27-05           01-19-01           201-573-9600

For the most up-to-date MSDS information  
please visit our website [www.benjaminmoore.com/msds/go.html](http://www.benjaminmoore.com/msds/go.html)

-----  
SECTION I - PRODUCT ID  
-----

PRODUCT\*: 023, n023                      \*\* HMIS CODE \*\*  
CLASS: WATER THINNED PAINT                      HEALTH: 1  
NAME: BM FRESH START ALL PURPOSE 100% ACRYLIC PRIMER                      FLAMMABILITY: 0  
COLOR: ALL                      REACTIVITY: 0  
PERSONAL PROT:

-----  
\*\* SARA TITLE 312 \*\*  
-----

ACUTE: N CHRONIC: N FIRE: N PRESSURE: N REACTIVITY: N  
For a complete description of HMIS and an explanation of the PERSONAL PROT:  
code, see Section XX.  
\*NOTE: In the PRODUCT code a little n can be any capital letter of the  
alphabet except P or Q.

-----  
SECTION II    HAZARDOUS INGREDIENTS  
-----

INGREDIENT								
HAZ	SARA	MAX %	CAS #	TLV	PEL	STEL	CEIL	MM Hg
-----								
Titanium Dioxide								
Y	N	11.4	013463-67-7	10 mg/M3	15 mg/M3	N/E	N/E	N/A
-----								
Kaolin, calcined								
Y	N	8.9	092704-41-1	30 mg/M3	N/E	N/E	N/E	N/A
-----								
Hydrous Aluminum Silicates								
Y	N	6.4	001332-58-7	2 Mg/M3	5 mg/M3	N/E	N/E	N/A
-----								
Diatomaceous Earth								
Y	N	3.4	061790-53-2	10 mg/M3	5 mg/M3	N/E	N/E	N/A
-----								

NOTE: This product contains no reported or suspected carcinogens  
Note: This product contains pigments which may become a dust nuisance when  
removed by abrasive blasting, sanding, or grinding.  
This product may contain small amounts of materials known to the State of  
California to cause cancer and reproductive harm.

-----  
SECTION III    PHYSICAL DATA  
-----

BOILING RANGE: N/A WT/GALLON: 9.6 to 10.1 %VOL BY VOLUME: 70.1 to 70.6  
EVAPORATION RATE: SLOWER THAN ETHER                      VAPOR DENSITY: HEAVIER THAN AIR

-----  
SECTION IV    FIRE AND EXPLOSION HAZARD DATA  
-----

D.O.T. FLAMMABILITY CLASS.: NOT REGULATED                      FLASH POINT: > 250 F PMCC  
LEL: Not Applicable

EXTINGUISHING MEDIA: FOAM CO2 DRY CHEMICAL WATER FOG

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Toxic gases may form when product burns.

Closed containers may burst if exposed to extreme heat or fire.

SPECIAL FIRE FIGHTING PROCEDURES:

Cool exposed containers with water. Use self-contained breathing apparatus.

---

#### SECTION V HEALTH HAZARD DATA

---

EFFECTS OF OVEREXPOSURE - ACUTE:

Inhalation - Causes nose and throat irritation.

Inhalation - Causes lung irritation.

Skin and Eye Contact - Primary irritation.

Ingestion of large amounts could cause serious injury.

EFFECTS OF OVEREXPOSURE - CHRONIC:

None Known

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE:

None expected when used in accordance with Safe Handling and Use Information (Section VIII).

Inhalation - Irritating to respiratory tract.

PRIMARY ROUTE(S) OF ENTRY: DERMAL INHALATION INGESTION

EMERGENCY AND FIRST AID PROCEDURES:

Inhalation - Remove to fresh air. Get medical help for any breathing difficulty.

Eye Contact - Flush thoroughly with water. Call physician.

Skin Contact - Wash with soap and water.

Ingestion - Drink 1 or 2 glasses of water to dilute.

DO NOT induce vomiting. Call physician.

---

#### SECTION VI REACTIVITY DATA

---

STABILITY: STABLE HAZARDOUS POLYMERIZATION WILL NOT OCCUR

CONDITIONS TO AVOID: Elevated temperatures

HAZARDOUS DECOMPOSITION PRODUCTS:

Burning may produce carbon dioxide and carbon monoxide.

INCOMPATIBILITY (MATERIALS TO AVOID): None reasonably foreseeable.

---

#### SECTION VII SPILL OR LEAK PROCEDURES

---

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Flush with water. Absorb with sawdust or rags.

WASTE DISPOSAL METHOD:

Conventional procedures in compliance with local, state and federal regulations. Do not incinerate sealed containers.

---

#### SECTION VIII SAFE HANDLING AND USE INFORMATION

---

RESPIRATORY PROTECTION:

Use NIOSH approved respirator specified for protection against paint spray mist and sanding dust in restricted or confined areas.

VENTILATION:

Adequate to maintain working atmosphere below T.L.V. and L.E.L.

(See Sect. II for ingredient data and concentrations). Mechanical exhaust may be required in confined areas.

PROTECTIVE GLOVES: Waterproof during repeated contact.

EYE PROTECTION: Splash goggles or safety glasses with side shields.

OTHER PROTECTIVE EQUIPMENT: Clothing adequate to protect skin.

**HYGIENIC PRACTICES:**

Remove and wash clothing before reuse. Wash hands before eating, smoking or using the washroom.

---

**SECTION IX SPECIAL PRECAUTIONS**

---

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:**

Do not throw or drop containers.

**OTHER PRECAUTIONS :**

Avoid contact with eyes and prolonged contact with skin or breathing of spray mist or sanding dust.

Close container after each use. Keep out of reach of children. Do not take internally.

---

**SECTION XX**

---

**HMIS (Hazardous Materials Identification System) (R) NPCA**

HMIS is a recognized workplace Hazard Communications System as required by OSHA (29 CFR 1910.1200). Information on establishing a compliant hazardous communication program using HMIS is available from:

American Labelmark Co., Inc., Labelmaster Division  
5724 N. Pulaski Rd., Chicago, IL 60646  
1-800-621-5808

The ratings assigned by Benjamin Moore & Co. are only suggested ratings; the contractor/employer has ultimate responsibility for HMIS rating where this system is used.

**PERSONAL PROTECTION:** This code is left blank on Benjamin Moore & Co. MSDS's as it depends on application technique and the workplace ventilation.

Please read Sections II through IX of this MSDS before deciding on appropriate protective equipment and beginning work. There are codes available for this section which can be obtained from Labelmaster.

Note: There are no SARA reportable materials in this product.

---

**DISCLAIMER**

---

The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.

**NOTICE:** Removal of old paint by sanding, scraping or other means may generate dust or fumes which contain lead. Exposure to lead dust or fumes may cause adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For additional information, contact the USEPA/Lead Information Hotline at 1-800-LEAD-FYI.

2897  
El Paso Energy



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/22/2008

Dear Zac or Dave

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # 2897

Expiration Date 7/22/2010

**Generator:** El Paso Energy

**Address:** 1001 Louisiana #T-3180  
Houston, TX 77002

### Waste Information

**Name of Waste:** Fresh start prime

**TCEQ Waste Code #:** CESQ2191

**Container Type:**

**Detailed Description of Process Generating Waste:**

general maintenance

**Color:** na

**Odor:** none

**pH:** na

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000916

Need PPE - just like the  
other OK  
\$65/drum, Class I liquids  
sludge

**CES Environmental  
Services, Inc.**

4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>  
TCEQ Industrial Solid Waste Permit Number: 30948  
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

PB

**SECTION 1: Generator Information**

Company: EL PASO ENERGY  
Address: 1001 LOUISIANA #T-3180  
City: HOUSTON State: TX Zip: 77002  
Contact: JEFF FRENCH Title: MAINT. MANAGER  
Phone Number: 713-420-4027 Fax Number: \_\_\_\_\_  
24/hr Phone Number: 800-468-1760  
US EPA ID No: TXD987990041  
State ID No: CESQG SIC Code: \_\_\_\_\_

**SECTION 2: Billing Information -** ☐ Same as Above

Company: CKG SERVICES  
Address: 10707 HONEA EGYPT ROAD  
City: MONTGOMERY State: TX Zip: 77316  
Contact: ZAC MCKAUGHAN Title: PRESIDENT  
Phone Number: 936-483-3662 Fax Number: 936-756-1226

**SECTION 3: General Description of the Waste**

Name of Waste: FRESH START PRIME  
Detailed Description of Process Generating Waste: GENERAL MAINTENANCE

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: NA Odor: NONE

Specific Gravity (water=1): NA Density: NA lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☒ Monthly ☐ Yearly ☐ One-Time

Quantity: FIVE

☐ Yes ☒ No

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)  
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009  
☐ D010 ☐ D011

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☒ No

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No

**Texas State Waste Code Number:** CESQ2191

Proper US DOT Shipping Name:		NON REGULATED/NON DOT/NON HAZ			
Class:	NA	UN/NA:	NA	PG :	NA
				RQ:	NA

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
NA		NA		NA <u>mg/l</u>		NA <u>mg/l</u>		NA <u>%</u>	
Oil & Grease		TOC		Zinc		Copper		Nickel	
NA	<u>mg/l</u>	NA	<u>mg/l</u>	NA	<u>mg/l</u>	NA	<u>mg/l</u>	NA	<u>mg/l</u>

[illegible]

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

NONE

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS

**SECTION 7: Incompatibilities**

Please list ALL Incompatibilities (if any):

None Known

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	_____	0
TCLP Volatiles:	_____	0
TCLP Semi-Volatiles:	_____	0
Reactivity:	_____	0
Corrosivity:	_____	0
Ignitability:	_____	0

**SECTION 9: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_

Date: 7/14/2008

Printed Name/Title: ZAC MCKAUGHAN / PRESIDENT

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: *Robert J. Ryan*

Date: 7-22-08

☒ Approved

☐ Rejected

Approval Number: 2897

**FRESH 3144 PRIMER**

**M A T E R I A L   S A F E T Y   D A T A   S H E E T   Rev. 05B**

For Coating, Resins, and Related Materials NPCA 1-84

Manufacturer's Name

Emergency Telephone No.

BENJAMIN MOORE & CO.

800-424-9300 (CHEMTREC)

51 CHESTNUT RIDGE RD

MONTVALE, NJ 07645

Date Prepared   Last Rev Date   Information Telephone No.

10-27-05

01-19-01

201-573-9600

For the most up-to-date MSDS information

please visit our website [www.benjaminmoore.com/msds/go.html](http://www.benjaminmoore.com/msds/go.html)

**SECTION I - PRODUCT ID**

**\*\* HMIS CODE \*\***

PRODUCT\*: 023, n023

HEALTH: 1

CLASS: WATER THINNED PAINT

FLAMMABILITY: 0

NAME: BM FRESH START ALL PURPOSE 100% ACRYLIC PRIMER

REACTIVITY: 0

COLOR: ALL

PERSONAL PROT:

**\*\* SARA TITLE 312 \*\***

ACUTE: N CHRONIC: N FIRE: N PRESSURE: N REACTIVITY: N

For a complete description of HMIS and an explanation of the PERSONAL PROT: code, see Section XX.

\*NOTE: In the PRODUCT code a little n can be any capital letter of the alphabet except P or Q.

**SECTION II HAZARDOUS INGREDIENTS**

INGREDIENT		HAZ SARA		MAX %	CAS #	TLV	PEL	STEL	CEIL	MM Hg
Titanium Dioxide		Y	N	11.4	013463-67-7	10 mg/M3	15 mg/M3	N/E	N/E	N/A
Kaolin, calcined		Y	N	8.9	092704-41-1	30 mg/M3	N/E	N/E	N/E	N/A
Hydrous Aluminum Silicates		Y	N	6.4	001332-58-7	2 Mg/M3	5 mg/M3	N/E	N/E	N/A
Diatomaceous Earth		Y	N	3.4	061790-53-2	10 mg/M3	5 mg/M3	N/E	N/E	N/A

NOTE: This product contains no reported or suspected carcinogens

Note: This product contains pigments which may become a dust nuisance when removed by abrasive blasting, sanding, or grinding.

This product may contain small amounts of materials known to the State of California to cause cancer and reproductive harm.

**SECTION III PHYSICAL DATA**

BOILING RANGE: N/A WT/GALLON: 9.6 to 10.1 %VOL BY VOLUME: 70.1 to 70.6

EVAPORATION RATE: SLOWER THAN ETHER

VAPOR DENSITY: HEAVIER THAN AIR

**SECTION IV FIRE AND EXPLOSION HAZARD DATA**

D.O.T. FLAMMABILITY CLASS.: NOT REGULATED

FLASH POINT: > 250 F PMCC

LEL: Not Applicable

EXTINGUISHING MEDIA: FOAM CO2 DRY CHEMICAL WATER FOG

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Toxic gases may form when product burns.

Closed containers may burst if exposed to extreme heat or fire.

SPECIAL FIRE FIGHTING PROCEDURES:

Cool exposed containers with water. Use self-contained breathing apparatus.

---

#### SECTION V HEALTH HAZARD DATA

---

EFFECTS OF OVEREXPOSURE - ACUTE:

Inhalation - Causes nose and throat irritation.

Inhalation - Causes lung irritation.

Skin and Eye Contact - Primary irritation.

Ingestion of large amounts could cause serious injury.

EFFECTS OF OVEREXPOSURE - CHRONIC:

None Known

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE:

None expected when used in accordance with Safe Handling and Use Information (Section VIII).

Inhalation - Irritating to respiratory tract.

PRIMARY ROUTE(S) OF ENTRY: DERMAL INHALATION INGESTION

EMERGENCY AND FIRST AID PROCEDURES :

Inhalation - Remove to fresh air. Get medical help for any breathing difficulty.

Eye Contact - Flush thoroughly with water. Call physician.

Skin Contact - Wash with soap and water.

Ingestion - Drink 1 or 2 glasses of water to dilute.

DO NOT induce vomiting. Call physician.

---

#### SECTION VI REACTIVITY DATA

---

STABILITY: STABLE HAZARDOUS POLYMERIZATION WILL NOT OCCUR

CONDITIONS TO AVOID: Elevated temperatures

HAZARDOUS DECOMPOSITION PRODUCTS:

Burning may produce carbon dioxide and carbon monoxide.

INCOMPATIBILITY (MATERIALS TO AVOID): None reasonably foreseeable.

---

#### SECTION VII SPILL OR LEAK PROCEDURES

---

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Flush with water. Absorb with sawdust or rags.

WASTE DISPOSAL METHOD:

Conventional procedures in compliance with local, state and federal regulations. Do not incinerate sealed containers.

---

#### SECTION VIII SAFE HANDLING AND USE INFORMATION

---

RESPIRATORY PROTECTION:

Use NIOSH approved respirator specified for protection against paint spray mist and sanding dust in restricted or confined areas.

VENTILATION:

Adequate to maintain working atmosphere below T.L.V. and L.E.L.

(See Sect. II for ingredient data and concentrations). Mechanical exhaust may be required in confined areas.

PROTECTIVE GLOVES: Waterproof during repeated contact.

EYE PROTECTION : Splash goggles or safety glasses with side shields.

OTHER PROTECTIVE EQUIPMENT: Clothing adequate to protect skin.

## HYGIENIC PRACTICES:

Remove and wash clothing before reuse. Wash hands before eating, smoking or using the washroom.

-----  
SECTION IX SPECIAL PRECAUTIONS  
-----

## PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Do not throw or drop containers.

## OTHER PRECAUTIONS :

Avoid contact with eyes and prolonged contact with skin or breathing of spray mist or sanding dust.

Close container after each use. Keep out of reach of children. Do not take internally.

-----  
SECTION XX  
-----

## HMIS (Hazardous Materials Identification System) (R) NPCA

HMIS is a recognized workplace Hazard Communications System as required by OSHA (29 CFR 1910.1200). Information on establishing a compliant hazardous communication program using HMIS is available from:

American Labelmark Co., Inc., Labelmaster Division  
5724 N. Pulaski Rd., Chicago, IL 60646  
1-800-621-5808

The ratings assigned by Benjamin Moore & Co. are only suggested ratings; the contractor/employer has ultimate responsibility for HMIS rating where this system is used.

PERSONAL PROTECTION: This code is left blank on Benjamin Moore & Co. MSDS's as it depends on application technique and the workplace ventilation. Please read Sections II through IX of this MSDS before deciding on appropriate protective equipment and beginning work. There are codes available for this section which can be obtained from Labelmaster.

Note: There are no SARA reportable materials in this product.

-----  
DISCLAIMER  
-----

The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.

NOTICE: Removal of old paint by sanding, scraping or other means may generate dust or fumes which contain lead. Exposure to lead dust or fumes may cause adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For additional information, contact the USEPA/Lead Information Hotline at 1-800-LEAD-FYI.

2898  
El Paso Energy



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/22/2008

Dear Zac or Dave

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2898

**Expiration Date** 7/22/2010

**Generator:** El Paso Energy

**Address:** 1001 Louisiana #T-3180  
Houston, TX 77002

### Waste Information

**Name of Waste:** Latex enamel undercoater

**TCEQ Waste Code #:** CESQ2191

**Container Type:**

**Detailed Description of Process Generating Waste:**

general maintenance

**Color:** na

**Odor:** none

**pH:** na

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**

none

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000924

GRP  
Need PFI - just like  
the others. 865 drum.  
Class 1: g or sludge



4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

DB

**SECTION 1: Generator Information**

Company: EL PASO ENERGY  
Address: 1001 LOUISIANA #T-3180  
City: HOUSTON State: TX Zip: 77002  
Contact: JEFF FRENCH Title: MAINT. MANAGER  
Phone Number: 713-420-4027 Fax Number: \_\_\_\_\_  
24/hr Phone Number: 800-468-1760  
US EPA ID No: TXD987990041  
State ID No: CESQG SIC Code: \_\_\_\_\_

**SECTION 2: Billing Information -** ☐ Same as Above

Company: CKG SERVICES  
Address: 10707 HONEA EGYPT ROAD  
City: MONTGOMERY State: TX Zip: 77316  
Contact: ZAC MCKAUGHAN Title: PRESIDENT  
Phone Number: 936-483-3662 Fax Number: 936-756-1226

**SECTION 3: General Description of the Waste**

Name of Waste: LATEX ENAMEL UNDERCOATER  
Detailed Description of Process Generating Waste: GENERAL MAINTENANCE

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: NA Odor: NONE

Specific Gravity (water=1): NA Density: NA lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESMAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☒ Monthly ☐ Yearly ☐ One-Time

Quantity: 1-5 ~~865~~

☐ Yes ☒ No

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)  
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009  
☐ D010 ☐ D011

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☒ No

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No

**Texas State Waste Code Number:** CE5QZ191

<b>Proper US DOT Shipping Name:</b>		<b>NON REGULATED/NON DOT/NON HAZ</b>			
<b>Class:</b>	NA	<b>UN/NA:</b>	NA	<b>PG :</b>	NA
				<b>RQ:</b>	NA

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
NA		NA		NA <u>mg/l</u>		NA <u>mg/l</u>		NA %	
Oil & Grease		TOC		Zinc		Copper		Nickel	
NA	<u>mg/l</u>	NA	<u>mg/l</u>	NA	<u>mg/l</u>	NA	<u>mg/l</u>	NA	<u>mg/l</u>

[illegible]

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

NONE

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

None Known

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	_____	0
TCLP Volatiles:	_____	0
TCLP Semi-Volatiles:	_____	0
Reactivity:	_____	0
Corrosivity:	_____	0
Ignitability:	_____	0

**SECTION 9: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_

Date: 7-14-08

Printed Name/Title: \_\_\_\_\_

ZAC MCKAUGHAN / PRESIDENT

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Robert Dwyer

Date: 7-22-08

☒ Approved

☐ Rejected

Approval Number: \_\_\_\_\_

2898

# M A T E R I A L   S A F E T Y   D A T A   S H E E T   Rev. 05B

For Coating, Resins, and Related Materials NPCA 1-04

Manufacturer's Name                      Emergency Telephone No.  
BENJAMIN MOORE & CO.                      800-424-9300 (CHEMTREC)

51 CHESTNUT RIDGE RD

MONTVALE, NJ 07645

Date Prepared   Last Rev Date   Information Telephone No.

01-19-01                      12-15-97                      201-573-9600

For the most up-to-date MSDS information  
please visit our website [www.benjaminmoore.com/msds/go.html](http://www.benjaminmoore.com/msds/go.html)

## SECTION I - PRODUCT ID

PRODUCT\*: 253, n253                      \*\* HMIS CODE \*\*  
CLASS: WATER THINNED PAINT                      HEALTH: 1  
NAME: MOORCRAFT SUPER SPEC LTX ENAMEL UNDERCOATER & P/S REACTIVITY: 0  
COLOR: ALL                      FLAMMABILITY: 0  
PERSONAL PROT: 0

### \*\* SARA TITLE 312 \*\*

ACUTE: N CHRONIC: N FIRE: N PRESSURE: N REACTIVITY: N  
For a complete description of HMIS and an explanation of the PERSONAL PROT:  
code, see Section XX.

\*NOTE: In the PRODUCT code a little n can be any capital letter of the  
alphabet except P or Q.

## SECTION II HAZARDOUS INGREDIENTS

INGREDIENT				TLV	PEL	STEL	CEIL	MM Hg
HAZ	SARA	MAX %	CAS #					
Titanium Dioxide								
Y	N	9.0	013463-67-7	10 mg/M3	10 mg/M3	N/E	N/E	N/A
Hydrous Alum Silicates								
Y	N	6.0	001332-58-7	10 mg/M3	10 mg/M3	N/E	N/E	N/A
Calcium Carbonate								
Y	N	16.7	000471-34-1	10 mg/M3	5 mg/M3	N/E	N/E	N/A
Ethylene Glycol Phenyl Ether								
Y	Y	1.0	000122-99-6	N/E	N/E	N/E	N/E	<.01 @ 2

NOTE: This product contains no reported or suspected carcinogens  
Note: This product contains pigments which may become a dust nuisance when  
removed by abrasive blasting, sanding, or grinding.  
This product may contain small amounts of materials known to the State of  
California to cause cancer and reproductive harm.

## SECTION III PHYSICAL DATA

BOILING RANGE: N/A WT/GALLON: 10.8 to 10.9 %VOL BY VOLUME: 68.1 to 69.6  
EVAPORATION RATE: SLOWER THAN ETHER VAPOR DENSITY: HEAVIER THAN AIR

## SECTION IV FIRE AND EXPLOSION HAZARD DATA

D.O.T. FLAMMABILITY CLASS.: NOT REGULATED FLASH POINT: > 250 F FMCC  
LEL: Not Applicable

EXTINGUISHING MEDIA: FOAM CO2 DRY CHEMICAL WATER FOG

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Toxic gases may form when product burns.

Closed containers may burst if exposed to extreme heat or fire.

SPECIAL FIRE FIGHTING PROCEDURES:

Cool exposed containers with water. Use self-contained breathing apparatus.

---

#### SECTION V HEALTH HAZARD DATA

---

EFFECTS OF OVEREXPOSURE - ACUTE:

Inhalation - Irritation of the respiratory tract.

Skin and Eye Contact - Primary irritation.

Ingestion of large amounts could cause serious injury.

EFFECTS OF OVEREXPOSURE - CHRONIC:

None Known

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE:

None expected when used in accordance with Safe Handling and Use Information (Section VIII).

PRIMARY ROUTE(S) OF ENTRY: DERMAL INHALATION INGESTION

EMERGENCY AND FIRST AID PROCEDURES :

Inhalation - Remove to fresh air. Get medical help for any breathing difficulty.

Eye Contact - Flush thoroughly with water. Call physician.

Skin Contact - Wash with soap and water.

Ingestion - Drink 1 or 2 glasses of water to dilute.

DO NOT induce vomiting. Call physician.

---

#### SECTION VI REACTIVITY DATA

---

STABILITY: STABLE HAZARDOUS POLYMERIZATION WILL NOT OCCUR

CONDITIONS TO AVOID: Elevated temperatures

HAZARDOUS DECOMPOSITION PRODUCTS:

Burning may produce carbon dioxide and carbon monoxide.

INCOMPATIBILITY (MATERIALS TO AVOID): None reasonably foreseeable.

---

#### SECTION VII SPILL OR LEAK PROCEDURES

---

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Flush with water. Absorb with sawdust or rags.

WASTE DISPOSAL METHOD:

Conventional procedures in compliance with local, state and federal regulations. Do not incinerate sealed containers.

---

#### SECTION VIII SAFE HANDLING AND USE INFORMATION

---

RESPIRATORY PROTECTION:

Use NIOSH approved respirator specified for protection against paint spray mist and sanding dust in restricted or confined areas.

VENTILATION:

Adequate to maintain working atmosphere below T.L.V. and L.E.L.

(See Sect. II for ingredient data and concentrations). Mechanical exhaust may be required in confined areas.

PROTECTIVE GLOVES: Waterproof during repeated contact.

EYE PROTECTION : Splash goggles or safety glasses with side shields.

OTHER PROTECTIVE EQUIPMENT: Clothing adequate to protect skin.

HYGIENIC PRACTICES:

Remove and wash clothing before reuse. Wash hands before eating, smoking

or using the washroom.

---

#### SECTION IX SPECIAL PRECAUTIONS

---

##### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Do not throw or drop containers.

##### OTHER PRECAUTIONS :

Avoid contact with eyes and prolonged contact with skin or breathing of spray mist or sanding dust.

Close container after each use. Keep out of reach of children. Do not take internally.

---

#### SECTION XX

---

##### HMIS (Hazardous Materials Identification System) (R) NPCA

HMIS is a recognized workplace Hazard Communications System as required by OSHA (29 CFR 1910.1200). Information on establishing a compliant hazardous communication program using HMIS is available from:

American Labelmark Co., Inc., Labelmaster Division  
5724 N. Pulaski Rd., Chicago, IL 60646  
1-800-621-5808

The ratings assigned by Benjamin Moore & Co. are only suggested ratings; the contractor/employer has ultimate responsibility for HMIS rating where this system is used.

PERSONAL PROTECTION: This code is left blank on Benjamin Moore & Co. MSDS's as it depends on application technique and the workplace ventilation.

Please read Sections II through IX of this MSDS before deciding on appropriate protective equipment and beginning work. There are codes available for this section which can be obtained from Labelmaster.

This product contains at least one toxic chemical listed in Section II that is subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and 40 CFR 372.

---

#### DISCLAIMER

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The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.

NOTICE: Removal of old paint by sanding, scraping or other means may generate dust or fumes which contain lead. Exposure to lead dust or fumes may cause adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For additional information, contact the USEPA/Lead Information Hotline at 1-800-LEAD-FYI.

2899.  
El Paso Energy



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/22/2008

Dear Zac or Dave

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2899

**Expiration Date** 7/22/2010

**Generator:** El Paso Energy

**Address:** 1001 Louisiana #T-3180  
Houston, TX 77002

### Waste Information

**Name of Waste:** Moorcraft enamel

**TCEQ Waste Code #:** CESQ2191

**Container Type:**

**Detailed Description of Process Generating Waste:**

general maintenance

**Color:** na

**Odor:** none

**pH:** na

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000932

YRP

OK



DB

4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

**SECTION 1: Generator Information**

Company: EL PASO ENERGY  
Address: 1001 LOUISIANA #T-3180  
City: HOUSTON State: TX Zip: 77002  
Contact: JEFF FRENCH Title: MAINT. MANAGER  
Phone Number: 713-420-4027 Fax Number: \_\_\_\_\_  
24/hr Phone Number: 800-468-1760  
US EPA ID No: TXD987990041  
State ID No: CESQG SIC Code: \_\_\_\_\_

**SECTION 2: Billing Information -** ☐ Same as Above

Company: CKG SERVICES  
Address: 10707 HONEA EGYPT ROAD  
City: MONTGOMERY State: TX Zip: 77316  
Contact: ZAC MCKAUGHAN Title: PRESIDENT  
Phone Number: 936-483-3662 Fax Number: 936-756-1226

**SECTION 3: General Description of the Waste**

Name of Waste: MOORCRAFT ENAMEL  
Detailed Description of Process Generating Waste: GENERAL MAINTENANCE

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: NA Odor: NONE

Specific Gravity (water=1): NA Density: NA lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☒ Monthly ☐ Yearly ☐ One-Time

Quantity: FIVE



**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

NONE

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

None Known

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	0
TCLP Volatiles:	0
TCLP Semi-Volatiles:	0
Reactivity:	0
Corrosivity:	0
Ignitability:	0

**SECTION 9: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_

Date: 7/14/2008

Printed Name/Title: \_\_\_\_\_

ZAC MCKAUGHAN / PRESIDENT

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: \_\_\_\_\_

Date: 7-22-08

Approval Number: \_\_\_\_\_

☒ Approved

☐ Rejected

2899



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

\$65/DM

**2. Contamination Limits (maximum limit before surcharges apply):**

None

**3. Surcharge Pricing:**

NA

**4. Special Testing Requirements:**

Make sure product fits MSDS

**5. Treatment and Handling Protocol:**

Class I Liquids or Sludge box depending on consistency

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☐ Subcategory B

☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**7. Tests for Product Recovered/Recycled (if applicable):**

Na

**8. Management for Product Recovered/Recycled (if applicable):**

Na

M A T E R I A L   S A F E T Y   D A T A   S H E E T   Rev. 07B  
For Coating, Resins, and Related Materials NPCA 1-84  
Manufacturer's Name                      Emergency Telephone No.  
BENJAMIN MOORE & CO.                      800-424-9300 (CHEMTREC)  
51 CHESTNUT RIDGE RD  
MONTVALE, NJ 07645

Date Prepared   Last Rev Date   Information Telephone No.  
11-30-01                      01-19-01                      201-573-9600

For the most up-to-date MSDS information  
please visit our website [www.benjaminmoore.com/msds/go.html](http://www.benjaminmoore.com/msds/go.html)

SECTION I - PRODUCT ID

PRODUCT\*: 274, n274                      \*\* HMIS CODE \*\*  
CLASS: WATER THINNED PAINT                      HEALTH: 1\*  
NAME: MOORCRAFT SUPER SPEC LATEX EGGSHELL ENAMEL                      FLAMMABILITY: 0  
COLOR: ALL                      REACTIVITY: 0  
PERSONAL PROT:

\*\* SARA TITLE 312 \*\*

ACUTE: N CHRONIC: Y FIRE: N PRESSURE: N REACTIVITY: N  
For a complete description of HMIS and an explanation of the PERSONAL PROT:  
code, see Section XX.

\*NOTE: In the PRODUCT code a little n can be any capital letter of the  
alphabet except P or Q.

SECTION II    HAZARDOUS INGREDIENTS

INGREDIENT	HAZ	SARA	MAX	CAS #	TLV	PEL	STEL	CEIL	MM Hg
Titanium Dioxide	Y	N	21.3	013463-67-7	10 mg/M3	10 mg/M3	N/E	N/E	N/A
Kaolin, calcined	Y	N	7.1	092704-41-1	30 mg/M3	N/E	N/E	N/E	N/A
Petroleum Defoamer	Y	N	1.1	000000-00-0	5 mg/M3	5 mg/M3	N/E	N/E	N/E
Calcium Carbonate	Y	N	19.1	000471-34-1	10 mg/M3	5 mg/M3	N/E	N/E	N/A
Silica, Crystalline	Y	N	2.8	014808-60-7	.1 mg/M3	.1 mg/M3	N/E	N/E	N/A

\*\*\*\*\*  
This product contains one or more reported carcinogens or suspected  
carcinogens which are noted NTP, IARC, or OSHA-Z in the other limits  
recommended column.

\*\*\*\*\*  
Note: This product contains pigments which may become a dust nuisance when  
removed by abrasive blasting, sanding, or grinding.  
This product may contain small amounts of materials known to the State of  
California to cause cancer and reproductive harm.

SECTION III    PHYSICAL DATA

BOILING RANGE: N/A WT/GALLON: 9.7 to 10.9 %VOL BY VOLUME: 62.7 to 69.5  
EVAPORATION RATE: SLOWER THAN ETHER VAPOR DENSITY: HEAVIER THAN AIR

---

#### SECTION IV FIRE AND EXPLOSION HAZARD DATA

---

D.O.T. FLAMMABILITY CLASS.: NOT REGULATED FLASH POINT: > 250 F FMCC  
LEL: Not Applicable  
EXTINGUISHING MEDIA: FOAM CO2 DRY CHEMICAL WATER FOG  
UNUSUAL FIRE AND EXPLOSION HAZARDS:  
Toxic gases may form when product burns.  
Closed containers may burst if exposed to extreme heat or fire.  
SPECIAL FIRE FIGHTING PROCEDURES:  
Cool exposed containers with water. Use self-contained breathing apparatus.

---

#### SECTION V HEALTH HAZARD DATA

---

EFFECTS OF OVEREXPOSURE - ACUTE:  
Inhalation - Irritation of the respiratory tract.  
Skin and Eye Contact - Primary irritation.  
Ingestion of large amounts could cause serious injury.  
EFFECTS OF OVEREXPOSURE - CHRONIC:  
Contains: Crystalline Silica which has been determined to be carcinogenic to humans (1) by IARC when in respirable form. Risk of cancer depends on duration and level of inhalation exposure to dust from sanding the dried paint or spray mist.  
MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE:  
None expected when used in accordance with Safe Handling and Use Information (Section VIII).  
Inhalation statement: Sanding dust inhalation may cause lung damage.  
PRIMARY ROUTE(S) OF ENTRY: DERMAL INHALATION INGESTION  
EMERGENCY AND FIRST AID PROCEDURES:  
Inhalation - Remove to fresh air. Get medical help for any breathing difficulty.  
Eye Contact - Flush thoroughly with water. Call physician.  
Skin Contact - Wash with soap and water.  
Ingestion - Drink 1 or 2 glasses of water to dilute.  
DO NOT induce vomiting. Call physician.

---

#### SECTION VI REACTIVITY DATA

---

STABILITY: STABLE HAZARDOUS POLYMERIZATION WILL NOT OCCUR  
CONDITIONS TO AVOID: Elevated temperatures  
HAZARDOUS DECOMPOSITION PRODUCTS:  
Burning may produce carbon dioxide and carbon monoxide.  
INCOMPATIBILITY (MATERIALS TO AVOID): None reasonably foreseeable.

---

#### SECTION VII SPILL OR LEAK PROCEDURES

---

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:  
Flush with water. Absorb with sawdust or rags.  
WASTE DISPOSAL METHOD:  
Conventional procedures in compliance with local, state and federal regulations. Do not incinerate sealed containers.

---

#### SECTION VIII SAFE HANDLING AND USE INFORMATION

---

RESPIRATORY PROTECTION:

Use NIOSH approved respirator specified for protection against paint spray mist and sanding dust in restricted or confined areas.

**VENTILATION:**

Adequate to maintain working atmosphere below T.L.V. and L.E.L.

(See Sect. II for ingredient data and concentrations). Mechanical exhaust may be required in confined areas.

**PROTECTIVE GLOVES:** Waterproof during repeated contact.

**EYE PROTECTION :** Splash goggles or safety glasses with side shields.

**OTHER PROTECTIVE EQUIPMENT:** Clothing adequate to protect skin.

**HYGIENIC PRACTICES:**

Remove and wash clothing before reuse. Wash hands before eating, smoking or using the washroom.

---

**SECTION IX SPECIAL PRECAUTIONS**

---

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:**

Do not throw or drop containers.

**OTHER PRECAUTIONS :**

Avoid contact with eyes and prolonged contact with skin or breathing of spray mist or sanding dust.

Close container after each use. Keep out of reach of children. Do not take internally.

---

**SECTION XX**

---

**HMIS (Hazardous Materials Identification System) (R) NFPA**

HMIS is a recognized workplace Hazard Communications System as required by OSHA (29 CFR 1910.1200). Information on establishing a compliant hazardous communication program using HMIS is available from:

American Labelmark Co., Inc., Labelmaster Division  
5724 N. Pulaski Rd., Chicago, IL 60646  
1-800-621-5808

The ratings assigned by Benjamin Moore & Co. are only suggested ratings; the contractor/employer has ultimate responsibility for HMIS rating where this system is used.

**PERSONAL PROTECTION:** This code is left blank on Benjamin Moore & Co. MSDS's as it depends on application technique and the workplace ventilation. Please read Sections II through IX of this MSDS before deciding on appropriate protective equipment and beginning work. There are codes available for this section which can be obtained from Labelmaster.

**Note:** There are no SARA reportable materials in this product.

---

**DISCLAIMER**

---

The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.

**NOTICE:** Removal of old paint by sanding, scraping or other means may generate dust or fumes which contain lead. Exposure to lead dust or fumes may cause adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use

of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For additional information, contact the USEPA/Lead Information Hotline at 1-800-LEAD-FYI.

2900  
Bioselect Fuels, Inc



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/22/2008

Dear Steve Sams

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # 2900

Expiration Date 7/22/2010

**Generator:** Bioselect Fuels, Inc  
**Address:** 4800 Old Port Industrial Rd  
Galveston, TX

### Waste Information

**Name of Waste:** Vegetable oil/sump water

**TCEQ Waste Code #:** Recycle

**Container Type:**

**Detailed Description of Process Generating Waste:**

Vegetable oil used in making biodiesel

**Color:** grey/yellow

**Odor:** mild

**pH:** 5-9

**Physical State:**

**Incompatibilities:** na

**Safety Related Data/Special Handling:**

na

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000943

YRP  
 Material cannot be a  
 emulsion.  
 The vegetable oil cannot  
 be water soluble - if it is  
 the load is non conforming.


**CES Environmental  
 Services, Inc.**

4904 Griggs Road Houston, TX 77021  
 Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit No: 30948  
 U.S. EPA ID No: TXD008950461 ISWR No: 30900

*fb*

**SECTION 1: Generator Information**

Company: BIOSELECT FUELS, INC.  
 Address: 4800 OLD PORT INDUSTRIAL ROAD  
 City, State, Zip: GALVESTON, TEXAS  
 Contact: STEVE SAMS Title: AUTH. BROKER FOR GENERATOR  
 Phone No: 713-530-4550 Fax No: 281-424-7748  
 24/hr Phone: 281-838-3400  
 U.S. EPA ID. No: TXR000079137  
 State I.D. SQG SIC Code: N/A

**SECTION 2: Billing Information - ☐ Same as Above**

Company: PHOENIX POLLUTION CONTROL AND ENVIRONMENTAL SERVICES, INC.  
 Address: 4808 FAIRMONT PARKWAY BOX #274  
 City, State, Zip: PASADENA, TEXAS 77505  
 Contact: STEVE SAMS Title: AUTH. BROKER FOR GENERATOR  
 Phone No: 281-838-3400 Fax No: 281-424-7748

**SECTION 3: General Description of the Waste**

Name of Waste: VETGABLE OIL / SUMP WATER

Detailed Description of Process Generating Waste: VETGABLE OIL USED IN MAKING BIODIESEL

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: GRAY/YELLOW

Odor: MILD

Specific Gravity (water=1): 0.8-0.9 Density: 6.5-7.5 lbs/gal

Layers: ☐ Single-phase ☒ Multi-phase

Container Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)

Container Size: 70 BBL

Frequency: ☒ Weekly ☐ Monthly ☐ Quarterly ☐ Yearly

Number of Units (containers): 3,000 GALLONS

Other: \_\_\_\_\_

Texas State Waste Code No: Recycle

Proper U.S. DOT Shipping Name: NON-RCRA / Non-DOT Regulated Material (Hydrocarbon & Water)

Class: N/A UN/NA: N/A PG: N/A RQ: N/A

Flash Point 7140	pH 5-9	Reactive Sulphides N/A mg/l	Reactive Cyanides N/A mg/l	Solids < 1 %
Oil & Grease 71500 mg/l	TOC N/A mg/l	Zinc N/A mg/l	Copper N/A mg/l	Nickel N/A mg/l

**SECTION 4: Physical and Chemical Data**

<b>COMPONENTS TABLE</b>		<b>Concentration</b>	<b>Units</b>
<b>The waste consists of the following materials</b>		<b>Ranges are acceptable</b>	<b>or %</b>
VETGABLE OIL		20-50 %	YOUNG
WATER		80-50 %	

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

PPE

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.

N/A

**SECTION 7: Incompatibilities**

Please list all incompatibilities (if any):

N/A

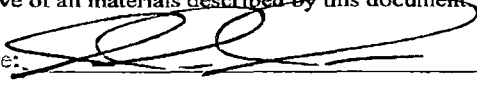
**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: ☒ X  
 TCLP Volatiles: ☒ X  
 TCLP Semi-Volatiles: ☒ X  
 Reactivity: ☒ X  
 Corrosivity: ☒ X  
 Ignitability: ☒ X

**SECTION 9: Generator's Certification**

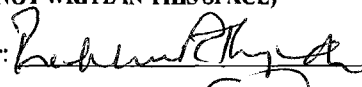
The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: 

Date: 07/14/08

Printed Name/Title: STEVE SAMS / AUTH. BROKER FOR GENERATOR

**CES USE ONLY (DO NOT WRITE IN THIS SPACE)**

Compliance Officer: 

Additional Information: \_\_\_\_\_

Date: 7-22-08

(Approved)

Rejected

Approval Number: 2900

**SECTION 10: Waste Receipt Classification Under 40 CFR 437**

Is this material a wastewater or wastewater sludge? ☒ YES ☐ NO

If 'Yes', complete this section.

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.**

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☒ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

- (1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.
- (2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

- (3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcategory

☒ Oils Subcategory

☐ Organics Subcategory

#### **SECTION 11: Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

1. **Base Pricing (including freight):**

\$0.10/gal + trans + fsc

2. **Contamination Limits (maximum limit before surcharges apply):**

std per rate sheet

3. **Surcharge Pricing:**

std per rate sheet

4. **Special Testing Requirements:**

5. **Treatment and Handling Protocol:**

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☒ Subcategory B

☐ Subcategory C

7. Tests for Product Recovered/Recycled (if applicable):

Received material oil cannot be an emulsion. The oil cannot be water soluble. If the vegetable oil is water soluble the recovered load is non-forming and can be rejected.

8. Management for Product Recovered/Recycled (if applicable):

Vegetable oil to black oil - water to waste water

2901

Port of Houston Authority - Turning Basin  
Terminal



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/23/2008

Dear Roxana Herrera

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2901

**Expiration Date** 7/23/2010

**Generator:** Port of Houston Authority-Turning basin terminal

**Address:** 7300 Clinton Drive  
Houston, TX 77029

### Waste Information

**Name of Waste:** Diesel water mixture

**TCEQ Waste Code #:** Recycle

**Container Type:**

**Detailed Description of Process Generating Waste:**

Water mixed in with diesel in a fuel tank

**Color:** pink

**Odor:** mild

**pH:** na

**Physical State:**

**Incompatibilities:** oxidizers

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000951



4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

GB / AL

**SECTION 1: Generator Information**

Company: Port of Houston Authority - Turning Basin Terminal  
Address: 7300 Clinton Drive  
City: Houston State: TX Zip: 77029  
Contact: Steve Senulis Title:  
Phone Number: (713) 670-2889 Fax Number:  
24/hr Phone Number:  
US EPA ID No:  
State ID No: SIC Code:

**SECTION 2: Billing Information -** ☐ Same as Above

Company: Port of Houston Authority  
Address: PO Box 2562  
City: Houston State: Texas Zip: 77252-2562  
Contact: Roxana Herrera Title:  
Phone Number: 713.670.2814 Fax Number: 713.670.2427

**SECTION 3: General Description of the Waste**

Name of Waste: Diesel water mixture

Detailed Description of Process Generating Waste:

Water mixed in with diesel in a fuel tank

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: pink Odor: mild

Specific Gravity (water=1): .74-.8 Density: 6.1-6.6 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☐ Single-phase ☒ Multi-phase

Container Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☒ Yearly ☐ One-Time

Quantity: 1

☐ Yes ☒ No

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)  
 Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009  
☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

☐ Yes ☒ No

If "Yes", then please list ALL applicable codes:

☐ Yes ☒ No

If "Yes", then please list ALL applicable codes:

recycle

Combustible Liquid, n.o.s.

<b>Class:</b>	<b>3 UN/NA:</b>	NA1993	<b>PG :</b>	II	<b>RQ:</b>	na
---------------	-----------------	--------	-------------	----	------------	----

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
140-200		na		0 <u>mg/l</u>		0 <u>mg/l</u>		5 %	
Oil & Grease		TOC		Zinc		Copper		Nickel	
na	mg/l	na	mg/l	na	mg/l	na	mg/l	na	mg/l

[illegible]

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

Standard

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. none

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

oxidizers

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals:	x
TCLP Volatiles:	x
TCLP Semi-Volatiles:	x
Reactivity:	x
Corrosivity:	x
Ignitability:	x

**SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)**

Is this material a wastewater or wastewater sludge?

☐ YES

☒ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L  
Chromium: 8.9 mg/L  
Copper: 4.9 mg/L  
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

**SECTION 10: Additional Instructions**

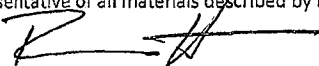
If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

**SECTION 11: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature:



Date:

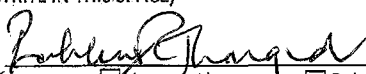
7-23-08

Printed Name/Title:

Roxane Herrera, Program Coordinator-Wtr & Wst

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer:



Date:

7-23-08

☒ Approved

☐ Rejected

Approval Number:

2901

1. Base Pricing (including freight):

Pay .30 gal Net Diesel;

2. Contamination Limit (maximum limit before surcharges apply):

3. Surcharge Pricing:

surcharges per rate sheet for solids, TOC

4. Special Testing Requirements:

check water phase for pH, TOC, phenol, solids

5. Treatment and Handling Protocol:

Water to Waste Water treatment; top organic phase to black oil

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A    ☐ Subcategory B    ☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**7. Tests for Product Recovered/Recycled (if applicable):**

--

**8. Management for Product Recovered/Recycled (if applicable)**

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2902  
Weingarten at citadel



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/24/2008

Dear Zac or Dave

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2902

**Expiration Date** 7/24/2010

**Generator:** Weingarten at Citadel

**Address:** 2600 Citadel Plaza Drive  
Houston, TX 77008

### Waste Information

**Name of Waste:** Drummed soil

**TCEQ Waste Code #:** CESQ3191

**Container Type:**

**Detailed Description of Process Generating Waste:**

sampling wells

**Color:** dark

**Odor:** none

**pH:** na

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000959



4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

DB

Chain of Custody

### SECTION 1: Generator Information

Company: WEINGARTEN REALTY INVESTORS

Address: 2600 CITADEL PLAZA DRIVE

City: HOUSTON State: TX Zip: 77008

Contact: CHUCK GURNEY Title:

Phone Number: 713-866-6855 Fax Number: 713-66-6066

24/hr Phone Number: 281-541-4829

US EPA ID No: TXCESQG

State ID No: CESQG SIC Code:

### SECTION 2: Billing Information - ☐ Same as Above

Company: CKG SERVICES

Address: 10707 HONEA EGYPT ROAD

City: MONTGOMERY State: TX Zip: 77316

Contact: ZAC MCKAUGHAN Title: PRESIDENT

Phone Number: 936-483-3662 Fax Number: 936-756-1226

### SECTION 3: General Description of the Waste

Name of Waste: DRUMMED SOIL

Detailed Description of Process Generating Waste: SAMPLING WELLS

Physical State: ☐ Liquid ☐ Sludge ☐ Powder  
☒ Solid ☒ Filter Cake ☐ Combination

Color: DARK Odor: NONE

Specific Gravity (water=1): NA Density: NA lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESMAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☒ Monthly ☐ Yearly ☐ One-Time

Quantity: FIVE

☐ Yes ☒ No

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)  
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009  
☐ D010 ☐ D011

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☒ No

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No

Texas State Waste Code Number: CESQ3191

**Class:** NA **UN/NA:** NA **PG :** NA **RQ:** NA

Flash Point		pH		Reactive Sulfides	Reactive Cyanides		Solids	
NA		NA		NA	mg/l	NA	mg/l	NA %
Oil & Grease		TOC		Zinc		Copper		Nickel
NA	mg/l	NA	mg/l	NA	mg/l	NA	mg/l	NA

[illegible]

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

NONE

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. ANALYTICAL

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

None Known

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	0
TCLP Volatiles:	0
TCLP Semi-Volatiles:	0
Reactivity:	0
Corrosivity:	0
Ignitability:	0

**SECTION 9: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_

Date: 7/14/2008

Printed Name/Title: ZAC MCKAUGHAN / PRESIDENT

CE5 USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Zac McKaughan

Date: 7-24-08

☒ Approved

☐ Rejected

Approval Number: 2902

**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

~~\$65/dm~~  
\$35/dm

**2. Contamination Limits (maximum limit before surcharges apply):**

None

**3. Surcharge Pricing:**

NA

**4. Special Testing Requirements:**

None-Open drum to make sure contents are as profile reads

**5. Treatment and Handling Protocol:**

Class 1 ~~Liquids or Sludge depending on consistency~~  
Solids

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A      ☐ Subcategory B      ☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**7. Tests for Product Recovered/Recycled (if applicable):**

Na
----

**8. Management for Product Recovered/Recycled (if applicable):**

Na
----

Job Number: 356030

## LABORATORY TEST RESULTS

Date: 07/09/2008

CUSTOMER: Buchanan Environmental Associates

PROJECT: LANDMARK SHOPPING CE

ATTN: David Buchanan

Customer Sample ID: DRUMMED SOIL  
 Date Sampled.....: 06/24/2008  
 Time Sampled.....: 10:00  
 Sample Matrix.....: Soil

Laboratory Sample ID: 356030-1  
 Date Received.....: 06/24/2008  
 Time Received.....: 12:32

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 3050B	Acid Digestion: Solids, Soil	Complete				1		401364		07/07/08 1520	srp
SW-846 3550B	Extraction (Ultrasonic) SVOCs Ultrasonic Extraction, Soil	Complete				1		400748		06/25/08 1400	mra
INRCC TX-1005	INRCC 1005 Extraction (Ultrasonic) INRCC 1005 Extraction, Soil	Complete				1		400787		06/26/08 0830	lvp
SW-846 7471A	Mercury (CVAA) Mercury (Hg), Soil	4.4	B	2.2	50.0	1	ug/Kg	401431		07/08/08 1545	dcl
SW-846 6010B	Metals Analysis (ICAP Trace) <i>stals</i> Antimony (Sb), Soil	0.290	U	0.290	2.50	1	ng/Kg	401455		07/08/08 0954	srp
	Arsenic (As), Soil	0.823	B	0.129	1.00	1	ng/Kg	401455		07/08/08 0954	srp
	Barium (Ba), Soil	37.0		0.0980	1.00	1	ng/Kg	401455		07/08/08 0954	srp
	Beryllium (Be), Soil	0.244	B	0.038	0.25	1	ng/Kg	401455		07/08/08 0954	srp
	Cadmium (Cd), Soil	0.014	U	0.014	0.25	1	ng/Kg	401455		07/08/08 0954	srp
	Chromium (Cr), Soil	2.50		0.0940	0.50	1	ng/Kg	401455		07/08/08 0954	srp
	Lead (Pb), Soil	2.71		0.128	0.50	1	ng/Kg	401455		07/08/08 0954	srp
	Nickel (Ni), Soil	3.14		0.0790	1.00	1	ng/Kg	401455		07/08/08 0954	srp
	Selenium (Se), Soil	0.168	U	0.168	2.00	1	ng/Kg	401455		07/08/08 0954	srp
	Silver (Ag), Soil	0.0510	U	0.0510	0.50	1	ng/Kg	401455		07/08/08 0954	srp
INRCC 1005	Direct Analytical TPH Method TX 1005 Petroleum Hydrocarbons C6 - C12, Soil	5.379	U	5.379	49.80	1.0000	ng/Kg	400834		06/26/08 1257	kp
	Petroleum Hydrocarbons C12 - C28, Soil	10.486	U	10.486	49.80	1.0000	ng/Kg	400834		06/26/08 1257	kp
	Petroleum Hydrocarbons C28 - C35, Soil	15.685	U	15.685	49.80	1.0000	ng/Kg	400834		06/26/08 1257	kp
	Petroleum Hydrocarbons C6 - C15, Soil	15.685	U	15.685	49.80	1.0000	ng/Kg	400834		06/26/08 1257	kp

Job Number: 356030

## LABORATORY TEST RESULTS

Date: 07/09/2008

CUSTOMER: Buchanan Environmental Associates

PROJECT: LANDMARK SHOPPING CE

ATTN: David Buchanan

Customer Sample ID: DRUMMED SOIL

Date Sampled.....: 06/24/2008

Time Sampled.....: 10:00

Sample Matrix.....: Soil

Laboratory Sample ID: 356030-1

Date Received.....: 06/24/2008

Time Received.....: 12:32

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 8270C	Semivolatile Organics											
	Acenaphthene, Soil	0.85	U		0.85	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Acenaphthylene, Soil	3.22	U		3.22	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Anthracene, Soil	1.15	U		1.15	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Benzo(a)anthracene, Soil	0.58	U		0.58	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Benzo(b)fluoranthene, Soil	1.19	U		1.19	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Benzo(k)fluoranthene, Soil	0.98	U		0.98	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Benzo(ghi)perylene, Soil	1.96	U		1.96	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Benzo(a)pyrene, Soil	0.61	U		0.61	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Butyl Benzyl Phthalate, Soil	0.85	U		0.85	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	bis(2-chloroethoxy)methane, Soil	1.31	U		1.31	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	bis(2-chloroethyl)ether, Soil	1.67	U		1.67	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	bis(2-chloroisopropyl)ether, Soil	1.15	U		1.15	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	bis(2-ethylhexyl)phthalate, Soil	2.10	U		2.10	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	4-Bromophenyl Phenyl Ether, Soil	0.99	U		0.99	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	4-Chloroaniline, Soil	1.01	U		1.01	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	2-Chloronaphthalene, Soil	1.14	U		1.14	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	4-Chlorophenyl Phenyl Ether, Soil	0.55	U		0.55	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Chrysene, Soil	0.68	U		0.68	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Dibenzo(a,h)anthracene, Soil	1.58	U		1.58	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Dibenzofuran, Soil	0.67	U		0.67	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	1,2-Dichlorobenzene, Soil	1.02	U		1.02	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	1,3-Dichlorobenzene, Soil	0.75	U		0.75	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	1,4-Dichlorobenzene, Soil	0.70	U		0.70	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Diethyl Phthalate, Soil	0.67	U		0.67	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Dimethyl Phthalate, Soil	0.89	U		0.89	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Di-n-butyl Phthalate, Soil	0.91	U		0.91	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Di-n-octyl Phthalate, Soil	1.32	U		1.32	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	2,4-Dinitrotoluene, Soil	0.81	U		0.81	330	1.00000	ug/Kg	401058		06/30/08 2117	maz

Job Number: 356030

## LABORATORY TEST RESULTS

Date: 07/09/2008

CUSTOMER: Buchanan Environmental Associates

PROJECT: LANDMARK SHOPPING CE

ATTN: David Buchanan

Customer Sample ID: DRILLED SOIL

Date Sampled.....: 06/24/2008

Time Sampled.....: 10:00

Sample Matrix.....: Soil

Laboratory Sample ID: 356030-1

Date Received.....: 06/24/2008

Time Received.....: 12:32

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	2,6-Dinitrotoluene, Soil	1.38	U		1.38	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Fluoranthene, Soil	1.12	U		1.12	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Fluorene, Soil	0.71	U		0.71	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Hexachlorobenzene, Soil	1.16	U		1.16	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Hexachlorobutadiene, Soil	0.74	U		0.74	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Hexachlorocyclopentadiene, Soil	0.71	U		0.71	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Hexachloroethane, Soil	0.97	U		0.97	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Indeno(1,2,3-cd)pyrene, Soil	1.58	U		1.58	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Isophorone, Soil	1.13	U		1.13	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	2-Methylnaphthalene, Soil	1.12	U		1.12	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Naphthalene, Soil	0.62	U		0.62	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Nitrobenzene, Soil	0.91	U		0.91	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	n-Nitrosodi-n-propylamine, Soil	2.14	U		2.14	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	n-Nitrosodiphenylamine, Soil	0.76	U		0.76	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Phenanthrene, Soil	0.66	U		0.66	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Pyrene, Soil	1.11	U		1.11	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	1,2,4-Trichlorobenzene, Soil	0.75	U		0.75	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	4-Chloro-3-methylphenol, Soil	1.19	U		1.19	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	2-Chlorophenol, Soil	0.87	U		0.87	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	2,4-Dichlorophenol, Soil	1.46	U		1.46	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	2,4-Dimethylphenol, Soil	0.86	U		0.86	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	2,4-Dinitrophenol, Soil	2.50	U		2.50	1700	1.00000	ug/Kg	401058		06/30/08 2117	maz
	2-Methyl-4,6-dinitrophenol, Soil	12.0	U		12.0	1700	1.00000	ug/Kg	401058		06/30/08 2117	maz
	2-Methylphenol (o-Cresol), Soil	1.39	U		1.39	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	4-Methylphenol (p-Cresol), Soil	1.88	U		1.88	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	2-Nitrophenol, Soil	1.18	U		1.18	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	4-Nitrophenol, Soil	7.22	U		7.22	1700	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Pentachlorophenol, Soil	11.0	U		11.0	1700	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Phenol, Soil	0.74	U		0.74	330	1.00000	ug/Kg	401058		06/30/08 2117	maz

Job Number: 356030

## LABORATORY TEST RESULTS

Date: 07/09/2008

CUSTOMER: Buchanan Environmental Associates

PROJECT: LANDMARK SHOPPING CE

ATTN: David Buchanan

Customer Sample ID: DRUMMED SOIL

Date Sampled.....: 06/24/2008

Time Sampled.....: 10:00

Sample Matrix.....: Soil

Laboratory Sample ID: 356030-1

Date Received.....: 06/24/2008

Time Received.....: 12:32

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 8260B	2,4,5-Trichlorophenol, Soil	1.70	U		1.70	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	2,4,6-Trichlorophenol, Soil	1.04	U		1.04	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	2-Nitroaniline, Soil	3.18	U		3.18	1700	1.00000	ug/Kg	401058		06/30/08 2117	maz
	3-Nitroaniline, Soil	3.70	U		3.70	1700	1.00000	ug/Kg	401058		06/30/08 2117	maz
	4-Nitroaniline, Soil	2.88	U		2.88	1700	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Carbazole, Soil	1.02	U		1.02	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	3,3'-Dichlorobenzidine, Soil	0.68	U		0.68	670	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Volatile Organics											
	Benzene, Soil	1.36	U		1.36	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Bromodichloromethane, Soil	1.46	U		1.46	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Bromoform, Soil	1.93	U		1.93	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Bromomethane, Soil	1.97	U		1.97	10	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Carbon Tetrachloride, Soil	1.59	U		1.59	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Chlorobenzene, Soil	1.60	U		1.60	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Chloroethane, Soil	2.19	U		2.19	10	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Chloroform, Soil	0.77	U		0.77	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Chloromethane, Soil	0.66	U		0.66	10	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Dibromochloromethane, Soil	1.65	U		1.65	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	1,1-Dichloroethane, Soil	1.70	U		1.70	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	1,2-Dichloroethane, Soil	2.43	U		2.43	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	1,1-Dichloroethene, Soil	1.18	U		1.18	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	1,2-Dichloroethene (total), Soil	1.20	U		1.20	10	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	cis-1,2-Dichloroethene, Soil	1.28	U		1.28	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	trans-1,2-Dichloroethene, Soil	0.87	U		0.87	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	1,2-Dichloropropane, Soil	1.86	U		1.86	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Ethylbenzene, Soil	1.40	U		1.40	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Methylene Chloride, Soil	1.43	U		1.43	10	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Styrene, Soil	1.60	U		1.60	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl

Job Number: 356030

## LABORATORY TEST RESULTS

Date: 07/09/2008

CUSTOMER: Buchanan Environmental Associates

PROJECT: LANDMARK SHOPPING CE

ATTN: David Buchanan

Customer Sample ID: DRUMMED SOIL

Date Sampled.....: 06/24/2008

Time Sampled.....: 10:00

Sample Matrix.....: Soil

Laboratory Sample ID: 356030-1

Date Received.....: 06/24/2008

Time Received.....: 12:32

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	ELAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	1,1,2,2-Tetrachloroethane, Soil	1.74	U		1.74	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Tetrachloroethane, Soil	1.66	U		1.66	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Toluene, Soil	1.33	U		1.33	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	1,1,1-Trichloroethane, Soil	1.22	U		1.22	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	1,1,2-Trichloroethane, Soil	0.51	U		0.51	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Trichloroethane, Soil	1.67	U		1.67	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Vinyl Chloride, Soil	1.66	U		1.66	10	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Xylenes (total), Soil	4.41	U		4.41	15	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Acetone, Soil	2.59	U		2.59	10	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Carbon Disulfide, Soil	1.22	U		1.22	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Methyl Ethyl Ketone (2-Butanone), Soil	1.86	U		1.86	10	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	cis-1,3-Dichloropropene, Soil	1.29	U		1.29	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	trans-1,3-Dichloropropene, Soil	1.35	U		1.35	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	2-Hexanone, Soil	1.20	U		1.20	10	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	4-Methyl-2-pentanone (MIBK), Soil	1.75	U		1.75	10	1.00000	ug/Kg	401358		07/03/08 1855	zfl

Job Number: 356030

## LABORATORY TEST RESULTS

Date: 07/09/2008

CUSTOMER: Buchanan Environmental Associates

PROJECT: LANDMARK SHOPPING CE

ATTN: David Buchanan

Customer Sample ID: DRUMMED SOIL

Date Sampled.....: 06/24/2008

Time Sampled.....: 10:00

Sample Matrix.....: Soil

Laboratory Sample ID: 356030-1

Date Received.....: 06/24/2008

Time Received.....: 12:32

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 3050B	Acid Digestion: Solids, Soil	Complete					1		401364		07/07/08 1520	srp
SW-846 3550B	Extraction (Ultrasonic) SVOCs Ultrasonic Extraction, Soil	Complete					1		400748		06/25/08 1400	mra
TNROC TX-1005	TNROC 1005 Extraction (Ultrasonic) TNROC 1005 Extraction, Soil	Complete					1		400787		06/26/08 0830	lvp
SW-846 7471A	Mercury (CVAA)- Mercury (Hg), Soil	4.4		B	2.2	50.0	1	ug/Kg	401431		07/08/08 1545	dcl
SW-846 6010B	Metals Analysis (ICAP Trace)											
	Antimony (Sb), Soil	0.290		U	0.290	2.50	1	ng/Kg	401455		07/08/08 0954	srp
	Arsenic (As), Soil	0.823		B	0.129	1.00	1	ng/Kg	401455		07/08/08 0954	srp
	Barium (Ba), Soil	37.0			0.0980	1.00	1	ng/Kg	401455		07/08/08 0954	srp
	Beryllium (Be), Soil	0.244		B	0.038	0.25	1	ng/Kg	401455		07/08/08 0954	srp
	Cadmium (Cd), Soil	0.014		U	0.014	0.25	1	ng/Kg	401455		07/08/08 0954	srp
	Chromium (Cr), Soil	2.50			0.0940	0.50	1	ng/Kg	401455		07/08/08 0954	srp
	Lead (Pb), Soil	2.71			0.128	0.50	1	ng/Kg	401455		07/08/08 0954	srp
	Nickel (Ni), Soil	3.14			0.0790	1.00	1	ng/Kg	401455		07/08/08 0954	srp
	Selenium (Se), Soil	0.168		U	0.168	2.00	1	ng/Kg	401455		07/08/08 0954	srp
	Silver (Ag), Soil	0.0510		U	0.0510	0.50	1	ng/Kg	401455		07/08/08 0954	srp
TNROC 1005	Direct Analytical TPH Method TX 1005											
	Petroleum Hydrocarbons C6 - C12, Soil	5.379		U	5.379	49.80	1.0000	ng/Kg	400834		06/26/08 1257	kp
	Petroleum Hydrocarbons C12 - C28, Soil	10.486		U	10.486	49.80	1.0000	ng/Kg	400834		06/26/08 1257	kp
	Petroleum Hydrocarbons C28 - C35, Soil	15.685		U	15.685	49.80	1.0000	ng/Kg	400834		06/26/08 1257	kp
	Petroleum Hydrocarbons C6 - C35, Soil	15.685		U	15.685	49.80	1.0000	ng/Kg	400834		06/26/08 1257	kp

Job Number: 356030

## LABORATORY TEST RESULTS

Date: 07/09/2008

CUSTOMER: Buchanan Environmental Associates

PROJECT: LANDMARK SHOPPING CE

ATTN: David Buchanan

Customer Sample ID: DRUMMED SOIL

Date Sampled.....: 06/24/2008

Time Sampled.....: 10:00

Sample Matrix.....: Soil

Laboratory Sample ID: 356030-1

Date Received.....: 06/24/2008

Time Received.....: 12:32

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-646 8270C	Semivolatile Organics											
	Acenaphthene, Soil	0.85	U		0.85	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Acenaphthylene, Soil	3.22	U		3.22	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Anthracene, Soil	1.15	U		1.15	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Benzo(a)anthracene, Soil	0.58	U		0.58	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Benzo(b)fluoranthene, Soil	1.19	U		1.19	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Benzo(k)fluoranthene, Soil	0.98	U		0.98	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Benzo(ghi)perylene, Soil	1.96	U		1.96	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Benzo(a)pyrene, Soil	0.61	U		0.61	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Butyl Benzyl Phthalate, Soil	0.85	U		0.85	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	bis(2-chloroethoxy)methane, Soil	1.31	U		1.31	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	bis(2-chloroethyl)ether, Soil	1.67	U		1.67	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	bis(2-chloroisopropyl) ether, Soil	1.15	U		1.15	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	bis(2-ethylhexyl)phthalate, Soil	2.10	U		2.10	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	4-Bromophenyl Phenyl Ether, Soil	0.99	U		0.99	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	4-Chloroaniline, Soil	1.01	U		1.01	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	2-Chloronaphthalene, Soil	1.14	U		1.14	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	4-Chlorophenyl Phenyl Ether, Soil	0.55	U		0.55	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Chrysene, Soil	0.68	U		0.68	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Dibenzo(a,h)anthracene, Soil	1.58	U		1.58	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Dibenzofuran, Soil	0.67	U		0.67	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	1,2-Dichlorobenzene, Soil	1.02	U		1.02	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	1,3-Dichlorobenzene, Soil	0.75	U		0.75	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	1,4-Dichlorobenzene, Soil	0.70	U		0.70	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Diethyl Phthalate, Soil	0.67	U		0.67	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Dimethyl Phthalate, Soil	0.89	U		0.89	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Di-n-butyl Phthalate, Soil	0.91	U		0.91	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Di-n-octyl Phthalate, Soil	1.32	U		1.32	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	2,4-Dinitrotoluene, Soil	0.81	U		0.81	330	1.00000	ug/Kg	401058		06/30/08 2117	maz

Job Number: 356030

## LABORATORY TEST RESULTS

Date: 07/09/2008

CUSTOMER: Buchanan Environmental Associates

PROJECT: LANDMARK SHOPPING CE

ATTN: David Buchanan

Customer Sample ID: DRILLED SOIL

Date Sampled.....: 06/24/2008

Time Sampled.....: 10:00

Sample Matrix.....: Soil

Laboratory Sample ID: 356030-1

Date Received.....: 06/24/2008

Time Received.....: 12:32

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	2,6-Dinitrotoluene, Soil	1.38	U	1.38	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Fluoranthene, Soil	1.12	U	1.12	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Fluorene, Soil	0.71	U	0.71	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Hexachlorobenzene, Soil	1.16	U	1.16	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Hexachlorobutadiene, Soil	0.74	U	0.74	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Hexachlorocyclopentadiene, Soil	0.71	U	0.71	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Hexachloroethane, Soil	0.97	U	0.97	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Indeno(1,2,3-cd)pyrene, Soil	1.58	U	1.58	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Isophorone, Soil	1.13	U	1.13	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	2-Methylnaphthalene, Soil	1.12	U	1.12	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Naphthalene, Soil	0.62	U	0.62	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Nitrobenzene, Soil	0.91	U	0.91	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	n-Nitrosodi-n-propylamine, Soil	2.14	U	2.14	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	n-Nitrosodiphenylamine, Soil	0.76	U	0.76	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Phenanthrene, Soil	0.66	U	0.66	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Pyrene, Soil	1.11	U	1.11	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	1,2,4-Trichlorobenzene, Soil	0.75	U	0.75	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	4-Chloro-3-methylphenol, Soil	1.19	U	1.19	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	2-Chlorophenol, Soil	0.87	U	0.87	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	2,4-Dichlorophenol, Soil	1.46	U	1.46	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	2,4-Dimethylphenol, Soil	0.86	U	0.86	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	2,4-Dinitrophenol, Soil	2.50	U	2.50	1700	1.00000	ug/Kg	401058		06/30/08 2117	maz
	2-Methyl-4,6-dinitrophenol, Soil	12.0	U	12.0	1700	1.00000	ug/Kg	401058		06/30/08 2117	maz
	2-Methylphenol (o-Cresol), Soil	1.39	U	1.39	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	4-Methylphenol (p-Cresol), Soil	1.88	U	1.88	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	2-Nitrophenol, Soil	1.18	U	1.18	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	4-Nitrophenol, Soil	7.22	U	7.22	1700	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Pentachlorophenol, Soil	11.0	U	11.0	1700	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Phenol, Soil	0.74	U	0.74	330	1.00000	ug/Kg	401058		06/30/08 2117	maz

Job Number: 356030

## LABORATORY TEST RESULTS

Date: 07/09/2008

CUSTOMER: Buchanan Environmental Associates

PROJECT: LANDMARK SHOPPING CE

ATTN: David Buchanan

Customer Sample ID: DRUMMED SOIL

Date Sampled.....: 06/24/2008

Time Sampled.....: 10:00

Sample Matrix.....: Soil

Laboratory Sample ID: 356030-1

Date Received.....: 06/24/2008

Time Received.....: 12:32

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	2,4,5-Trichlorophenol, Soil	1.70	U		1.70	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	2,4,6-Trichlorophenol, Soil	1.04	U		1.04	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	2-Nitroaniline, Soil	3.18	U		3.18	1700	1.00000	ug/Kg	401058		06/30/08 2117	maz
	3-Nitroaniline, Soil	3.70	U		3.70	1700	1.00000	ug/Kg	401058		06/30/08 2117	maz
	4-Nitroaniline, Soil	2.88	U		2.88	1700	1.00000	ug/Kg	401058		06/30/08 2117	maz
	Carbazole, Soil	1.02	U		1.02	330	1.00000	ug/Kg	401058		06/30/08 2117	maz
	3,3'-Dichlorobenzidine, Soil	0.68	U		0.68	670	1.00000	ug/Kg	401058		06/30/08 2117	maz
SW-846 8260B	Volatile Organics											
	Benzene, Soil	1.36	U		1.36	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Bromodichloromethane, Soil	1.46	U		1.46	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Bromoform, Soil	1.93	U		1.93	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Bromomethane, Soil	1.97	U		1.97	10	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Carbon Tetrachloride, Soil	1.59	U		1.59	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Chlorobenzene, Soil	1.60	U		1.60	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Chloroethane, Soil	2.19	U		2.19	10	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Chloroform, Soil	0.77	U		0.77	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Chloromethane, Soil	0.66	U		0.66	10	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Dibromochloromethane, Soil	1.65	U		1.65	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	1,1-Dichloroethane, Soil	1.70	U		1.70	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	1,2-Dichloroethane, Soil	2.43	U		2.43	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	1,1-Dichloroethene, Soil	1.18	U		1.18	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	1,2-Dichloroethene (total), Soil	1.20	U		1.20	10	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	cis-1,2-Dichloroethene, Soil	1.28	U		1.28	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	trans-1,2-Dichloroethene, Soil	0.87	U		0.87	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	1,2-Dichloropropane, Soil	1.86	U		1.86	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Ethylbenzene, Soil	1.40	U		1.40	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Methylene Chloride, Soil	1.43	U		1.43	10	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Styrene, Soil	1.60	U		1.60	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl

Job Number: 356030

## LABORATORY TEST RESULTS

Date: 07/09/2008

CUSTOMER: Buchanan Environmental Associates

PROJECT: LANDMARK SHOPPING CE

ATTN: David Buchanan

Customer Sample ID: DRUMMED SOIL

Date Sampled.....: 06/24/2008

Time Sampled.....: 10:00

Sample Matrix.....: Soil

Laboratory Sample ID: 356030-1

Date Received.....: 06/24/2008

Time Received.....: 12:32

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	1,1,2,2-Tetrachloroethane, Soil	1.74	U		1.74	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Tetrachloroethene, Soil	1.66	U		1.66	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Toluene, Soil	1.33	U		1.33	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	1,1,1-Trichloroethane, Soil	1.22	U		1.22	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	1,1,2-Trichloroethane, Soil	0.51	U		0.51	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Trichloroethane, Soil	1.67	U		1.67	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Vinyl Chloride, Soil	1.66	U		1.66	10	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Xylenes (total), Soil	4.41	U		4.41	15	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Acetone, Soil	2.59	U		2.59	10	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Carbon Disulfide, Soil	1.22	U		1.22	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	Methyl Ethyl Ketone (2-Butanone), Soil	1.86	U		1.86	10	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	cis-1,3-Dichloropropene, Soil	1.29	U		1.29	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	trans-1,3-Dichloropropene, Soil	1.35	U		1.35	5	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	2-Hexanone, Soil	1.20	U		1.20	10	1.00000	ug/Kg	401358		07/03/08 1855	zfl
	4-Methyl-2-pentanone (MIBK), Soil	1.75	U		1.75	10	1.00000	ug/Kg	401358		07/03/08 1855	zfl

STL

713-690-4444

#

## CHAIN OF CUSTODY RECORD

[illegible]

STL8222H-600 (0803)

**STL Houston**  
6310 Rothway Drive  
Houston, TX 77040

\*RUSH TURNAROUND MAY REQUIRE SURCHARGE

EPАНО106000975

2903  
Gulf Stream Marine (Greenspet)



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/25/2008

Dear Larry

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2903

**Expiration Date** 7/25/2010

**Generator:** Gulf Stream Marine (Greensport)

**Address:** 13609 Industrial Rd  
Houston, TX 77015

### Waste Information

**Name of Waste:** TPH Contaminated Soil

**TCEQ Waste Code #:** CESQ4891

**Container Type:** roll-off

**Detailed Description of Process Generating Waste:**

removal of soil around maintenance shop

**Color:** dark

**Odor:** hydrocarbon

**pH:** na

**Physical State:**

**Incompatibilities:** none known

**Safety Related Data/Special Handling:**

standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000977

DC



4904 Griggs Road, Houston, TX 77021  
 Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>  
 TCEQ Industrial Solid Waste Permit Number: 30948  
 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

**SECTION 1: Generator Information**

**Company:** Gulf Stream Marine (Greensport)  
**Address:** 13609 Industril Road  
**City:** Houston **State:** TX **Zip:** 77015  
**Contact:** Larry Guterrez **Title:** Environmental/Safety manager  
**Phone Number:** 713-289-2177 **Fax Number:** 713 453-3898  
**24/hr Phone Number:** 713-816-3052  
**US EPA ID No:** TXCESQG  
**State ID No:** CESQG **SIC Code:** NA

**SECTION 2: Billing Information -** ☐ Same as Above

**Company:** Gulf Stream Marine  
**Address:** 10000 Manchester  
**City:** Houston **State:** TX **Zip:** 77012  
**Contact:** Larry Guterrez **Title:**   
**Phone Number:** 713-289-2177 **Fax Number:** 713 453-3898

**SECTION 3: General Description of the Waste**

**Name of Waste:** TPH Contaminated Soil  
**Detailed Description of Process Generating Waste:**

removal of soil around maintenance shop

**Physical State:** ☐ Liquid ☐ Sludge ☐ Powder  
☒ Solid ☐ Filter Cake ☐ Combination

**Color:** dark **Odor:** hydrocarbon

**Specific Gravity (water=1):** 1.2 **Density:** 8.5 lbs/gal

**Does this material contain any total phenolic compounds?** ☐ Yes ☒ No

**Does this material contain any para substituted phenolic compounds?** ☐ Yes ☒ No

**Is the Waste subject to the benzene waste operation NESHA? (40 CFR Part 61, Subpart FF)** ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

**Layers:** ☒ Single-phase ☐ Multi-phase

**Container Type:** ☐ Drum ☐ Tote ☐ Truck ☒ Other (explain)

**Frequency:** ☐ Weekly ☐ Monthly ☒ Yearly ☐ One-Time

**Quantity:** 2

☐ Yes ☒ No

**If "Yes", Is it:**

☐ D002 (Corrosive)

☐ D003 (Reactive)

☐ D004

☐ D005

☐ D006

☐ D007

☐ D008

D009

☐ D010

☐ D011

**Characteristic for Toxic Organics: D012 thru D043** (please list all that apply)

☐ Yes ☒ No

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No

☐ Yes☒ No

If "Yes", then please list ALL applicable codes:

CESQ4891

Non RCRA/Non DOT Regulated Soil

**Class:** NA

UN/NA:

---

NA

**PG :**

NA

**RQ:**

NA

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
NA		NA		NA <u>mg/l</u>		NA <u>mg/l</u>		100	%
Oil & Grease		TOC		Zinc		Copper		Nickel	
>1500	<u>mg/l</u>	NA	<u>mg/l</u>	NA	<u>mg/l</u>	NA	<u>mg/l</u>	NA	<u>mg/l</u>

#### SECTION 4: Physical and Chemical Data

[illegible]

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.

Analysis 8070132

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

None Known

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals: X

TCLP Volatiles: X

TCLP Semi-Volatiles: X

Reactivity: X

Corrosivity: X

Ignitability: X

**SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)**

Is this material a wastewater or wastewater sludge?

☐ YES

☒ NO

If 'Yes', complete this section.

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.**

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

- (1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.
- (2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.
- Cadmium: 0.2 mg/L  
Chromium: 8.9 mg/L  
Copper: 4.9 mg/L  
Nickel: 37.5 mg/L
- (3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.
- ☐ Metals Subcategory
  - ☐ Oils Subcategory
  - ☐ Organics Subcategory

**SECTION 10 Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

**SECTION 11: Generator's Certification**

The information contained herein is based on ☐ generator knowledge and/or ☒ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Printed Name/Title: \_\_\_\_\_

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: \_\_\_\_\_

Date: \_\_\_\_\_

☒ Approved

☐ Rejected

Approval Number: \_\_\_\_\_

2903



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**1. Base Pricing (including freight):**

\$350.00/ load freight, \$85.00/yard disposal

**2. Contamination Limit (maximum limit before surcharges apply):**

None

**3. Surcharge Pricing:**

None

**4. Special Testing Requirements:**

None

**5. Treatment and Handling Protocol:**

No free liquids! REDIRECT to Republic

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A    ☐ Subcategory B    ☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**7. Tests for Product Recovered/Recycled (if applicable):**

NA

**8. Management for Product Recovered/Recycled (if applicable)**

NA

# Mercury Environmental Services, Inc.

6913 HWY 225, Deer Park, TX 77536  
Phone: (281)-476-4534 Fax: (281)-476-4406

**CES Environmental Services**  
4904 Griggs Rd  
Houston, TX 77021

Phone: (713) 676-1460  
Fax: (713) 748-8664

Attn: **Karl Guidry**

## - CERTIFICATE OF RESULTS -

**MES Lab#:** 8070132

**Client Sample ID:** Soil

**Project#:** 0708-22

**Extended ID:** Project Name: Gulf Stream Marine

**Sample Collect Date:** 7/8/2008 @ 10:55:00 AM

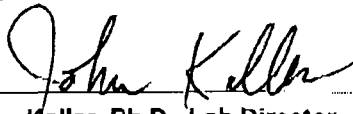
**Sample Type:** Comp

**Sample Receipt Date:** 7/8/2008 @ 4:26:00 PM

### **Test Group / Method**

Total Petroleum Hydrocarbons Solid				Analyst: HDG
Method: TNRCC 1005	MDL	Result	Units	Date / Time
C6 - C12 Hydrocarbons	4	229	mg/kg	7/15/2008 / 4:32 AM
>C12 - C28 Hydrocarbons	8	27700	mg/kg	7/15/2008 / 4:32 AM
>C28 - C36 Hydrocarbons	8	1960	mg/kg	7/15/2008 / 4:32 AM
Total TPH	20	29900	mg/kg	7/15/2008 / 4:32 AM

Flags: H: Exceeds "High Limit" L: Below "Low Limit" RL=regulatory limit

  
John Keller, Ph.D., Lab Director

Tuesday, July 22, 2008

Date

Report Date: 22-Jul-08

Page 1 of 1

8070132

MERCURY ENVIRONMENTAL SERVICES  
QA/QC REPORT

ANALYTES	METHOD TPH1005	MB mg/kg	CCV %REC	MS %REC	MSD %REC
C6-C12		< 4	112.8	126.5	119.6
C12-C28		< 8	110.6	114.6	107.4

Key to QA Abbreviations

MS=Matrix Spike  
MSD=Matrix Spike Duplicate  
RPD=Relative Percent Deviation  
MB=Method Blank  
LCS=Laboratory Control Standard  
CCV=Continuing Calibration Verification  
CCB=Continuing Calibration Blank  
%Rec=Percent Recovery

Signature: \_\_\_\_\_

John Keller / Laboratory Director

July 22, 2008

Mercury Environmental Services, Inc.

COMPANY NAME: (BILL TO) CES Environmental Services Inc  
 COMPANY ADDRESS: 4404 Griggs Road  
 CITY Houston STATE TX ZIP 77021  
 CONTACT PERSON'S NAME: Dana Carter  
 CONTACT PERSON'S PHONE: 713-489804 FAX #: 713-676-1476

**MES**

- CHAIN OF CUSTODY

1-800-771-4MES  
(281) 476-4534Mercury Environmental Services  
6913 Hwy. 225 • Deer Park, TX 77536

Fax (281)-476-4406

2 YOUR PROJECT NO.: 0708-21 YOUR P.O. #: Gulf Stream Marine YOUR PROJECT NAME:  
 PROJECT ADDRESS:

YOUR SAMPLE DESCRIPTION	GRAB/COMP.	DATE	TIME	MATRIX
<u>Soil</u>	<u>Comp</u>	<u>7/18/08</u>	<u>1055A</u>	<u>Solid</u>

## PARAMETERS FOR ANALYSIS

4 TPH

NUMBER OF CONTAINERS  
PRESERVATIONS

5 REMARKS  
 TURNAROUND TIME: Standard  
 DETECTION LIMITS  
 SPECIAL LIMITS REQUIRED  
 Yes No  
 Please circle one, if Yes, please describe below or include separate sheet detailing requirements.

on ice

6 PERSON TAKING SAMPLE SIGNATURE (a. - Print Name & b. Sign.):  
Dana Carter Dana Carter  
 RELINQUISHED BY: (Signature) Dana Carter DATE 7-18-08 TIME 1021  
 RECEIVED BY: (Signature)  
 7 RELINQUISHED BY: (Signature) DATE TIME RECEIVED BY: (Signature)  
 8 METHOD OF PAYMENT SHIPPED BY: (Signature) COURIER (Signature) RECEIVED FORMES BY: (Signature) DATE TIME  
Robin Hughes 7-18-08 11025  
 Sample Remainder Disposal  
☐ Return Sample Remainder To Client Via \_\_\_\_\_ (Signature) \_\_\_\_\_ (Date)  
☐ Request Lab To Dispose Of All Sample Remainders

Form # MES - CCR1

WHITE &amp; CANARY - Shipped with Sample

PINK - Retained by Customer

WHITE - Returned with Report

2905  
Green Earth Fuels LLC



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/25/2008

Dear **Jesse Plancarte**

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2905

**Expiration Date** 7/25/2010

**Generator:** Green Earth Fuels LLC

**Address:** 550 Clinton Drive  
Galena Park, TX

### Waste Information

**Name of Waste:** Methanol Wastewater

**TCEQ Waste Code #:** 00081011

**Container Type:**

**Detailed Description of Process Generating Waste:**

Rinse water from biodiesel plant operations

**Color:** clear

**Odor:** mild

**pH:** 2.5-7

**Physical State:**

**Incompatibilities:** None Known

**Safety Related Data/Special Handling:**

Standard

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000988



**CES Environmental  
Services, Inc.**

4904 Griggs Road, Houston, TX 77021

Phone: (713) 676-1460 Fax: (713) 676-1676

<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

50

**SECTION 1: Generator Information**

Company: GREEN FUEL GREEN EARTH FUELS LLC  
Address: 550 Clinton Dr  
City: Galena Park State: TEXAS Zip: \_\_\_\_\_  
Contact: Adrian Randle Title: SAFETY  
Phone Number: 713-534-3842 Fax Number: \_\_\_\_\_  
24/hr Phone Number: 713-534-3842  
US EPA ID No: \_\_\_\_\_  
State ID No: \_\_\_\_\_ SIC Code: \_\_\_\_\_

**SECTION 2: Billing Information - ☐ Same as Above**

Company: Rada Technologies  
Address: P.O. Box 1147  
City: Rockland State: TX Zip: 77588  
Contact: Jesse Plancarte Title: President  
Phone Number: 281-541-4429 Fax Number: E-mail Jesse.Plancarte@radatech.com

**SECTION 3: General Description of the Waste**

Name of Waste: METHANOL WASTEWATER  
Detailed Description of Process Generating Waste:

Rinse water from Biodiesel plant operations

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: Clear Odor: mild

Specific Gravity (water=1): 1 Density: 8.34 lbs/gal

Does this material contain any total phenolic compounds? ☒ Yes ☐ No 2 ppm

Does this material contain any para substituted phenolic compounds? ☐ Yes ☐ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☒ Yearly ☐ One-Time

Quantity: AS Needed

☐ Yes ☒ No

If "Yes", Is it:

☐ D003 (Reactive)☐ D009

☐ D011

☐ Yes☒ No☐ Yes☐ No

000 81011

Now RCRA Non DOT Regulated Waste Water

人々

**PG :**

**RQ:**

NA

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

Standard

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.

LES TEST Results

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

NONE KNOWN

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:

X

TCLP Volatiles:

X

TCLP Semi-Volatiles:

X

Reactivity:

X

Corrosivity:

X

Ignitability:

X

**SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)**

Is this material a wastewater or wastewater sludge?

☒ YES

☐ NO

If 'Yes', complete this section.

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.**

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

- (1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.
- (2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.
- Cadmium: 0.2 mg/L  
Chromium: 8.9 mg/L  
Copper: 4.9 mg/L  
Nickel: 37.5 mg/L
- (3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.
- ☐ Metals Subcategory
  - ☐ Oils Subcategory
  - ☒ Organics Subcategory

**SECTION 10 Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

**SECTION 11: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☒ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Printed Name/Title: \_\_\_\_\_

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: \_\_\_\_\_

Date: \_\_\_\_\_

Approval Number: \_\_\_\_\_

☒ Approved

☐ Rejected



PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

\$ .12/gal

2. Contamination Limit (maximum limit before surcharges apply):

Toc 10,000

3. Surcharge Pricing:

\$ .05/gal per 5000 Toc

4. Special Testing Requirements:

pH, Phenol, Toc

5. Treatment and Handling Protocol:

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A    ☐ Subcategory B    ☒ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**7. Tests for Product Recovered/Recycled (if applicable):**

--

**8. Management for Product Recovered/Recycled (if applicable)**

--

## Al Longoria

---

**From:** Joy Baker  
**Sent:** Friday, July 25, 2008 3:37 PM  
**To:** Al Longoria  
**Subject:** FW: Sample ID 0708-41

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

---

**From:** Godefroy Gbery <ggbery@cesenvironmental.com>  
**Sent:** Friday, July 25, 2008 1:41 PM  
**To:** Joy Baker <jbaker@cesenvironmental.com>  
**Cc:** Miles Root <mroot@cesenvironmental.com>  
**Subject:** Sample ID 0708-41

PH 3.02

Phenol 2 ppm

TOC 16290 ppm

Metals

Untreated Sample: Cd 0.052 ppm; Cr 0.00 ppm; Cu 0.042 ppm; Ni 0.057 ppm; Zn 0.073 ppm

Treated sample: Cd 0.016 ppm; Cr 0.00 ppm; Cu 0.043 ppm; Ni 0.072 ppm; Zn 0.027 ppm

2906  
Kinder Morgan



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/31/2008

Dear Jonny Salinas

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2906

**Expiration Date** 7/31/2010

**Generator:** Kinder Morgan

**Address:** 906 Clinton Dr  
Galena Park, TX 77547

### Waste Information

**Name of Waste:** MTBE and water mixture

**TCEQ Waste Code #:** Recycle

**Container Type:**

**Detailed Description of Process Generating Waste:**

From the cleaning of a tank containing MTBE

**Color:** clear

**Odor:** mild, ether like

**pH:** na

**Physical State:**

**Incompatibilities:** oxidizers

**Safety Related Data/Special Handling:**

PPE for flammable material

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106000997

MB  
JR

4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

**SECTION 1: Generator Information**

Company: Kinder Morgan - Galena Park

Address: 906 Clinton Drive

City: Galena Park State: TX Zip: 77547

Contact: Lance Wiley Title:

Phone Number: 713-724-4912 Fax Number:

24/hr Phone Number:

US EPA ID No: TXD026481253

State ID No: 30573 SIC Code:

**SECTION 2: Billing Information:** ☒ Same as Above

Company:

Address:

City: State: Zip:

Contact: Title:

Phone Number: Fax Number:

**SECTION 3: General Description of the Waste**

Name of Waste: MTBE &amp; Water mixture

Detailed Description of Process Generating Waste:

From the cleaning of a tank containing MTBE

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: Clear Odor: Mild, Ether like

Specific Gravity (water=1): 0.74 Density: <sup>6-7</sup> Vapor 3.1 lbs/galDoes this material contain any total phenolic compounds? ☐ Yes ☒ NoDoes this material contain any para substituted phenolic compounds? ☐ Yes ☒ NoIs the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☐ Single-phase ☒ Multi-phaseContainer Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)Frequency: ☐ Weekly ☐ Monthly ☐ Yearly ☒ One-Time

Quantity: apx. 30,000 gallons

☐ Yes ☒ No

**If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto**

☐ D001 (Ignitable)

☐ D003 (Reactive)

☐ D004

D005

D006

☐ D007

☐ D008

□ p009

**D010**

☐ D011

**Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)**

☐ Yes ☒ No

**If "Yes", then please list ALL applicable codes:**

**40 CFR 261.33(e) or (f)?**

☐ Yes ☒ No

If "Yes", then please list ALL applicable codes:

RECYCLE

RECYCLE  
CN 2348, Flammable liquid, n.o.s. (PQ-MTBE)  
PQ Flammable liquids N.O.S. (Methyl tert-butyl ether)

3 UN/NA:

UN199323

PG:

**RQ:**

100f

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
<50		11.5		51% <u>11.5</u> mg/l		N/A mg/l		0 %	
Oil & Grease		TOC		Zinc		Copper		Nickel	
N/A	mg/l	<u>11.5</u> BRL	mg/l	<u>11.5</u> BRL	mg/l	<u>11.5</u> BRL	mg/l	<u>11.5</u> BRL	mg/l

#### **SECTION 4: Physical and Chemical Data**

[illegible]

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

PPE For Flammable material / MTBE

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

oxidizer

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals: BRL

TCLP Volatiles: BRL

TCLP Semi-Volatiles: BRL

Reactivity: Non-Reactive

Corrosivity: Non-Corrosive

Ignitability: Ignitable

**SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)**

Is this material a wastewater or wastewater sludge?

☐ YES

☒ NO

If 'Yes', complete this section.

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.**

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

**SECTION 10 Additional Instructions**

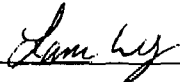
If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

**SECTION 11: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_



Date: \_\_\_\_\_

7/29/08

Printed Name/Title: \_\_\_\_\_

Lance Wilcox Sr. EHS Specialist

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: \_\_\_\_\_



Date: \_\_\_\_\_

7-31-08

☒ Approved☐ Rejected

Approval Number: \_\_\_\_\_

2906

1. Base Pricing (including freight):

\$ .65 /gallon w/ \$500 min. per load  
\$69/hr trans, ~~wt~~ plus current F.S.C.

2. Contamination Limit (maximum limit before surcharges apply):

3. Surcharge Pricing:

Surcharges for solids per sized drive

4. Special Testing Requirements:

Decant all hydrocarbons and manage as light ends.  
% water, solids, flash, metals

5. Treatment and Handling Protocol:

→ Take water to newpark

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A    ☐ Subcategory B    ☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**7. Tests for Product Recovered/Recycled (if applicable):**

--

**8. Management for Product Recovered/Recycled (if applicable)**

--

2907  
Calpine Baytown Energy Center



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/31/2008

Dear Lue Miller

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2907

**Expiration Date** 7/31/2010

**Generator:** Calpine Baytown Energy Center

**Address:** 8605 FM 1405  
Baytown, TX 77520

### Waste Information

**Name of Waste:** spent resin beads

**TCEQ Waste Code #:** 00184032

**Container Type:**

**Detailed Description of Process Generating Waste:**

from wastewater filtration system

**Color:** varies

**Odor:** mild

**pH:** 8-12.5

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**

level d

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.



**CES Environmental  
Services, Inc.**

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

DB

**SECTION 1: Generator Information**

Company : Calpine Baytown Energy Center  
Address : 8605 FM 1405 PO Box 840  
City, State, Zip : Baytown TX 77520  
Contact : Lue Miller Title :  
Phone No : (281) 303-4200 Fax : (281) 303-4299  
24 / HR Phone :  
U.S EPA I.D No : TXR000043976  
State I.D : 86845 SIC Code na

**SECTION 2: Billing Information**

Company : Calpine Baytown Energy Center  
Address : 8605 FM 1405 PO Box 840  
City, State, Zip : Baytown TX 77520  
Contact : Lue Miller Title :  
Phone No : (281) 303-4200 Fax : (281) 303-4299

**SECTION 3: General Description of the Waste**

Name of Waste : Spent Resin Beads

Detailed Description of the Process Generating Waste:  
from wastewater filtration system

Physical State : ☐ Liquid ☐ Sludge ☐ Powder  
☒ Solid ☐ Filter Cake ☐ Combination

Color : varies Odor : mild

Specific Gravity (Water=1) : 1.125 Density : 9.16 na lbs / gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☐ No

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834	2835	2836	2841	2842	2843	2844	2851
2861	2865	2869	2873	2874	2876	2879	2891	2892	2893	2896	2899	2911	3312	4953	4959	9511

Layers : ☒ Single-Phas ☐ Multi-Phase

Container Type : ☒ Drum ☐ Tote ☒ Truck ☐ Other (explain)

Container Size : 55 Gal

Number Of Units : na

Is this a USEPA "Hazardous Waste" per 40 CFR 261.3? ☐ Yes ☒ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 ☐ D002 ☐ D003

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007  
☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristics for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☒ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code No : 00184032

Proper U.S. State Waste Code No : \_\_\_\_\_ Non-RCRA/Non-DOT Regulated Material

Class : na UN/NA : na PG : na RQ : na

Flash Point <u>&gt;150</u>	pH <u>8-12.5</u>	Reactive Sulfides <u>0</u> mg/l	Reactive Cyanides <u>0</u> mg/l	Solids <u>100</u> %
Oil and Grease <u>&lt;1000</u> mg/l	TOC <u>&lt;1000</u> mg/l	Zinc <u>0</u> mg/l	Copper <u>0</u> mg/l	Nickel <u>0</u> mg/l

#### SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	Concentration	Units
The material / product consists of the following materials	Ranges are acceptable	or %
<u>Spent resin beads</u>	<u>100</u>	<u>%</u>

#### SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Level D

#### SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.

TCLP analysis, 11 Metals

#### SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

NONE

#### SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generators knowledge

TCLP Metals : ☒  
TCLP Volatiles : ☒  
TCLP Semi-Volatiles : ☒  
Reactivity : ☒

Corrosivity :   X    
Ignitability :   X  

**SECTION 9: Waste Receipt Classification Under 40 CFR 437**

Is this material a wastewater or wastewater sludge ?    ☐ YES    ☒ NO

If 'YES', complete this section

**PLEASE CHECK THE APPROPRIATE BOX: IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE**

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation wastes
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesive and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations

☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcategory

☐ Oils Subcategory

☐ Organics Subcategory

#### SECTION 10: Additional Instruction

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

#### SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☒ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature : *Rick Damon* Date : 2/20/08

Printed Name / Title : Rick Damon / Plant Engineer

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Process Facility Information :

Compliance Officer : Prabhakar Thangudu

Date : 1-31-08 Status : Approved Rejected

Approval Number : 2907

# Mercury Environmental Services, Inc.

6913 HWY 225, Deer Park, TX 77536

Phone: (281)-476-4534 Fax: (281)-476-4406

Calpine - Baytown Energy Center  
P.O. Box 840  
Baytown, TX 77521

Phone: (281) 303-4216

Fax: (281) 303-4299

Attn: Rick Damon

## - CERTIFICATE OF RESULTS -

MES Lab#: 7090709

Client Sample ID: Used Resin

Extended ID: MX20012093

Sample Collect Date: 9/24/2007 @ 3:00:00 PM

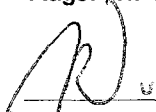
Sample Type: Grab

Sample Receipt Date: 9/26/2007 @ 1:00:00 PM

### Test Group / Method

TCLP Metals (11) Method: SW-846 6010B					Analyst: AM Date / Time
	MDL	RL	Result	Units	
Antimony	0.032	1	< 0.032	mg/L	9/28/2007 / 5:34 PM
Arsenic	0.014	5	< 0.014	mg/L	9/28/2007 / 5:34 PM
Barium	0.0005	100	<b>0.718</b>	mg/L	9/28/2007 / 5:34 PM
Beryllium	0.0005	0.08	< 0.0005	mg/L	9/28/2007 / 5:34 PM
Cadmium	0.002	1	<b>0.004</b>	mg/L	9/28/2007 / 5:34 PM
Chromium	0.002	5	< 0.002	mg/L	9/28/2007 / 5:34 PM
Lead	0.005	5	< 0.005	mg/L	9/28/2007 / 5:34 PM
Nickel	0.003	70	< 0.003	mg/L	9/28/2007 / 5:34 PM
Selenium	0.024	1	< 0.024	mg/L	9/28/2007 / 5:34 PM
Silver	0.002	5	<b>0.008</b>	mg/L	9/28/2007 / 5:34 PM
TCLP Mercury Method: SW-846 7470A					Analyst: AM Date / Time
	MDL	RL	Result	Units	
Mercury	0.0002	0.2	< 0.0002	mg/L	9/28/2007 / 4:32 PM

Flags: H: Exceeds "High Limit" L: Below "Low Limit" RL=regulatory limit



Holland D. Gilmore, Laboratory Director

Friday, October 05, 2007

Date

7090709

**MERCURY ENVIRONMENTAL SERVICES  
QA/QC REPORT**

ANALYTE	MB mg/L	LCS %REC	LCSD %REC	RPD	CCB mg/L	CCV %REC	MS %REC	MSD %REC	RPD
Antimony	< 0.005	107.5	111	3.32	< 0.005	105	81.2	83.6	2.9
Arsenic	< 0.002	94	94	0.7	< 0.002	91	76.4	77.2	1.04
Barium	< 0.002	105.0	105	0.43	< 0.002	101	65.2	67.7	3.8
Beryllium	< 0.002	109.6	110	0.73	< 0.002	107	82.1	84.6	3.1
Cadmium	< 0.001	109.4	110.9	1.32	< 0.001	107	70.9	72.0	1.5
Chromium	< 0.001	109	107	2.50	< 0.001	103	70.0	72.2	3.0
Lead	< 0.002	106.1	109.2	2.90	< 0.002	107	67.7	71.9	6.1
Mercury	< 0.0002	101.0	97.5	3.53	< 0.0002	102.0			
Nickel	< 0.001	105	106	1.66	< 0.001	104	69.3	74.9	7.7
Selenium	< 0.024	108.1	91.4	16.7	< 0.024	87	64.9	61.8	5.0
Silver	< 0.001	110	109	0.91	< 0.001	104	73.4	75.6	3.06

Key to QA Abbreviations

MS=Matrix Spike

MSD=Matrix Spike Duplicate

RPD=Relative Percent Deviation

MB=Method Blank

LCS=Laboratory Control Standard

CCV=Continuing Calibration Verification

%Rec=Percent Recovery

Signature: \_\_\_\_\_

**Holland D. Gilmore / Laboratory Director**

October 5, 2007

*Mercury Environmental Services, Inc.*

**EPAHO106001011**

**Fax (281)-476-4406**

Please circle one, if Yes,  
please describe below  
or include separate  
sheet detailing  
requirements.

rice

☐ I Request Lab To Dispose Of All Sample Reminders

(Signature) \_\_\_\_\_ (Date) \_\_\_\_\_

ΕΡΑΗΟ106001012

M Lopez @ calpine.com

956-648-9463

Jerrin

Bergin

Jan Stavinova

Calpine  
Downtown

Brian Smith



CES Environmental  
Services, Inc.

**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

*Calpine Resin Drums*

**1. Base Pricing (including freight):**

\$35/dm-Class2

**2. Contamination Limits (maximum limit before surcharges apply):**

None

**3. Surcharge Pricing:**

Reject if non-conforming

**4. Special Testing Requirements:**

None

**5. Treatment and Handling Protocol:**

Class 2 solids box

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☐ Subcategory B

☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**7. Tests for Product Recovered/Recycled (if applicable):**

Na

**8. Management for Product Recovered/Recycled (if applicable):**

Na

2908

Calpine Baytown Energy Center



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/31/2008

Dear Lue Miller

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2908

**Expiration Date** 7/31/2010

**Generator:** Calpine Baytown Energy Center

**Address:** 8605 FM 1405  
Baytown, TX 77520

### Waste Information

**Name of Waste:** Universal waste fluorescent light bulbs

**TCEQ Waste Code #:** UNIV

**Container Type:** 4' box

**Detailed Description of Process Generating Waste:**

spent fluorescent light bulbs

**Color:** varies

**Odor:** none

**pH:** na

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**

level d

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.



**CES Environmental  
Services, Inc.**

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
http://www.cesenvironmental.com  
TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

DB

**SECTION 1: Generator Information**

Company : Calpine Baytown Energy Center  
Address : 8605 FM 1405 PO Box 840  
City, State, Zip : Baytown TX 77520  
Contact : Lue Miller Title :  
Phone No : (281) 303-4200 Fax : (281) 303-4299  
24 / HR Phone :  
U.S EPA I.D No : TXR000043976  
State I.D : 86845 SIC Code na

**SECTION 2: Billing Information**

Company : Calpine Baytown Energy Center  
Address : 8605 FM 1405 PO Box 840  
City, State, Zip : Baytown TX 77520  
Contact : Lue Miller Title :  
Phone No : (281) 303-4200 Fax : (281) 303-4299

**SECTION 3: General Description of the Waste**

Name of Waste : Universal waste fluorescent light bulbs

**Detailed Description of the Process Generating Waste:**

spent fluorescent light bulbs

Physical State : ☐ Liquid ☐ Sludge ☐ Powder  
☒ Solid ☐ Filter Cake ☐ Combination

Color : varies Odor : none

Specific Gravity (Water=1) : na Density : na lbs / gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☐ No

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834	2835	2836	2841	2842	2843	2844	2851
2861	2865	2869	2873	2874	2876	2879	2891	2892	2893	2896	2899	2911	3312	4953	4959	9511

Layers : ☒ Single-Phas ☐ Multi-Phase

Container Type : ☐ Drum ☐ Tote ☐ Truck ☒ Other (explain) 4' boxes

Container Size : 4' boxes

Number Of Units : NA

Is this a USEPA "Hazardous Waste" per 40 CFR 261.3? ☐ Yes ☐ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 ☐ D002 ☐ D003

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007  
☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristics for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☒ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code No : UNIN

Proper U.S. State Waste Code No : Environmentally hazardous substances, solid, n.o.s.

Class : 9 UN/NA : UN3077 PG : III RQ : na

Flash Point na	pH na	Reactive Sulfides 0 mg/l	Reactive Cyanides 0 mg/l	Solids 100 %
Oil and Grease 0 mg/l	TOC 0 mg/l	Zinc 0 mg/l	Copper 0 mg/l	Nickel 0 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	Concentration	Units
The material / product consists of the following materials	Ranges are acceptable	or %
Fluorescent light bulbs	100	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Level D

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.

NONE

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

NONE

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generators knowledge

TCLP Metals : ☒  
TCLP Volatiles : ☒  
TCLP Semi-Volatiles : ☒  
Reactivity : ☒

Corrosivity :   X  

Ignitability :   X  

**SECTION 9: Waste Receipt Classification Under 40 CFR 437**

Is this material a wastewater or wastewater sludge ?    ☐ YES    ☒ NO

If 'YES', complete this section

**PLEASE CHECK THE APPROPRIATE BOX: IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE**

**Metals Subcategory:    *Subpart A***

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory:    *Subpart B***

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation wastes
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory:    *Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesive and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations

☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcategory

☐ Oils Subcategory

☐ Organics Subcategory

#### SECTION 10: Additional Instruction

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

#### SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☒ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature : Rick Damon Date : 7/28/08

Printed Name / Title : Rick Damon / Plant Engineer

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Process Facility Information :

Compliance Officer : Prabhakar Thangudu

Date : 7-31-08 Status : Approved Rejected

Approval Number : 2908



Calpine light bulbs

**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

\$1.10/foot- Each bulb is 4-6 foot

**2. Contamination Limits (maximum limit before surcharges apply):**

None

**3. Surcharge Pricing:**

Reject if non-conforming

**4. Special Testing Requirements:**

None

**5. Treatment and Handling Protocol:**

Record the total number received and put with universal wastes

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☐ Subcategory B

☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**7. Tests for Product Recovered/Recycled (if applicable):**

Na

**8. Management for Product Recovered/Recycled (if applicable):**

Na

2909  
Externer



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 8/4/2008

Dear Zac or Dave

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # 2909

Expiration Date 8/4/2010

Generator: Exterran

Address: 9553 Old Baston Saratoga Rd  
Sour Lake, TX 77659

### Waste Information

Name of Waste: Used oil and rainwater

TCEQ Waste Code #: Recycle

Container Type:

Detailed Description of Process Generating Waste:

Used engine oil

Color: black

Odor: oil

pH: 6-10

Physical State:

Incompatibilities: oxidizers

Safety Related Data/Special Handling:

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

PB



**CES Environmental Services, Inc.**

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>  
TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

**SECTION 1: Generator Information**

Company: Exterran  
Address: 9553 Old Batson Saratoga Rd  
City, State, Zip: Sour Lake, Texas 77659  
Contact: Elizabeth M. R. Ygnacio Title: PM  
Phone No: 281-836-7560 Fax No: 281-836-8560  
24/hr Phone: 281-836-7560  
U.S. EPA I.D. No: CESQ  
State I.D. TXCESQ6 SIC Code: NA

**SECTION 2: Billing Information - ☐ Same as Above**

Company: CES SERVICES  
Address: 10707 Hanna Egypt  
City, State, Zip: Casa Montgomery, TX 77316  
Contact: THE MC LAUGHLIN Title: RESIDENT  
Phone No: 936-453-3662 Fax No: 936-756-1231

**SECTION 3: General Description of the Waste**

Name of Waste: Used Waste Oil and Rain Water  
Detailed Description of Process Generating Waste: used Waste engine oil

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: Black

Odor: none oil

Specific Gravity (water=1): ≤1

Density: 8 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☐ Single-phase ☒ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Container Size: 55 gal

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☒ Yearly

Number of Units (containers): 10

Other: NON RECYCLABLE

Texas State Waste Code No:

Proper U.S. DOT Shipping Name:

Class:

UN/NA:

PG:

RQ:

Flash Point >200	pH 6-10	Reactive Sulfides 0mg/l	Reactive Cyanides 0mg/l	Solids 0-10%
Oil & Grease 90-100mg/l <i>1/2</i>	TOC 0mg/l	Zinc 0mg/l	Copper 0mg/l	Nickel 0mg/l

#### SECTION 4: Physical and Chemical Data

COMPONENTS TABLE		Concentration	Units
The waste consists of the following materials		Ranges are acceptable	or %
Waste Oil	<i>Used oil</i>	90-100	
Rain Water		0-10	

#### SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

*NA* *std*

#### SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.

*NA*

#### SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

*NA* *oxidize*

#### SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: *NA*  
TCLP Volatiles: *NA*  
TCLP Semi-Volatiles: *NA*  
Reactivity: *NA*  
Corrosivity: *NA*  
Ignitability: *NA*

#### SECTION 9: Generator's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: *Rob Janak*

Date: *7-30-08*

Printed Name/Title: *Rob Janak* *DIVISION MANAGER*

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Compliance Officer: <i>Robert Janak</i>	
Date: <i>8-4-08</i> <i>Approved</i> <i>Rejected</i>	
Approval Number: <i>2909</i>	

1. Base Pricing (including freight):

\$ 50 /dm

2. Contamination Limit (maximum limit before surcharges apply):

- Fails Chlor-d-test - Reject
- < 120° Flash

3. Surcharge Pricing:

Very High TOC

4. Special Testing Requirements:

TOC, pH, % Solids, phenols, <sup>metals</sup> on the water phase  
Chlor-d-test  
Flash Point > on oil phase

5. Treatment and Handling Protocol:

oily water → Hydrocarbon process facility

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A

☒ Subcategory B

☐ Subcategory C

DB



PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

Standard Used oil reg S

8. Management for Product Recovered/Recycled (if applicable)

used oil after oil is recovered

2910  
Exterran



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 8/4/2008

Dear Zac or Dave

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # 2910

Expiration Date 8/4/2010

Generator: Exterran

Address: 9553 Old Baston Saratoga Rd  
Sour Lake, TX 77659

### Waste Information

Name of Waste: Oil filters

TCEQ Waste Code #: Recycle

Container Type:

Detailed Description of Process Generating Waste:

Used oil filters

Color: black

Odor: none

pH: 6-10

Physical State:

Incompatibilities: none

Safety Related Data/Special Handling:

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106001031

DB



**CES Environmental  
Services, Inc.**

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
http://www.cesenvironmental.com  
TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

**SECTION 1: Generator Information**

Company: Exterran  
Address: 9553 Old Batson Saratoga Rd  
City, State, Zip: Sour Lake, Texas 77659  
Contact: Elizabeth M. R. Ygnacio Title: PM  
Phone No: 281-836-7560 Fax No: 281-836-8560  
24/hr Phone: 281-836-7560  
U.S. EPA I.D. No: CESD  
State I.D. TX LFSD4 SIC Code: NA

**SECTION 2: Billing Information ~ ☐ Same as Above**

Company: WGA SERVICES LLC  
Address: 10707 HONER EAVPT  
City, State, Zip: Downsview TX 77316 Montgomery  
Contact: ZAC Title: PRESIDENT  
Phone No: 936-483-3162 Fax No: 936-754-1226

**SECTION 3: General Description of the Waste**

Name of Waste: Oil Filters

Detailed Description of Process Generating Waste: Used Oil filters

Physical State: ☐ Liquid ☐ Sludge ☐ Powder  
☒ Solid ☐ Filter Cake ☐ Combination

Color: Black

Odor: none

Specific Gravity (water=1): NA

Density: NA lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Container Size: 55 gal

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☒ Yearly

Number of Units (containers): 1

Other: \_\_\_\_\_

Texas State Waste Code No: \_\_\_\_\_

Proper U.S. DOT Shipping Name: NON-REG RECYCLABLE

Class: \_\_\_\_\_

UN/NA: \_\_\_\_\_

PG: \_\_\_\_\_

RQ: \_\_\_\_\_

Flash Point ≥200	pH 6-10	Reactive Solids 0mg/l	Reactive Cyanides 0mg/l	Solids 0-10% <i>100-95-80</i>
Oil & Grease 90-100mg/l <i>150</i>	TOC 0mg/l	Zinc 0mg/l	Copper 0mg/l	Nickel 0mg/l

#### SECTION 4: Physical and Chemical Data

COMPONENTS TABLE		Concentration	Units
The waste consists of the following materials		Ranges are acceptable	or %
Oil Filters		95-100	
Waste Oil <i>used oil</i>		0-5	

#### SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

NA *std*

#### SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.

NA

#### SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

NA

#### SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: NA  
TCLP Volatiles: NA  
TCLP Semi-Volatiles: NA  
Reactivity: NA  
Corrosivity: NA  
Ignitability: NA

#### SECTION 9: Generator's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: *Rob Janak* Date: *7-31-08*

Printed Name/Title: *Rob Janak Division Manager*

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Compliance Officer: <i>Robert Janak</i>	
Date: <i>8-4-08</i>	Approved <input checked="" type="checkbox"/> Rejected <input type="checkbox"/>
Approval Number: <i>2910</i>	



PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

\$35/dm

2. Contamination Limit (maximum limit before surcharges apply):

N/A - Be sure fits profile

3. Surcharge Pricing:

N/A

4. Special Testing Requirements:

N/A

5. Treatment and Handling Protocol:

Used oil Filters, send to recycler

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A

☐ Subcategory B

☐ Subcategory C N/A



PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

N/A

8. Management for Product Recovered/Recycled (if applicable)

N/A

2918  
Flow-Tek



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/28/2008

Dear Greg Patterson

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2918

**Expiration Date** 7/28/2010

**Generator:** Flow-Tek

**Address:** 11850 Tanner Rd  
Houston, TX 77041

### Waste Information

**Name of Waste:** used oil

**TCEQ Waste Code #:** Recycle

**Container Type:**

**Detailed Description of Process Generating Waste:**

used oil from forklifts and equipment

**Color:** varies

**Odor:** none

**pH:** na

**Physical State:**

**Incompatibilities:** oxidizers

**Safety Related Data/Special Handling:**

level d

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.



**CES Environmental  
Services, Inc.**

DB

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
http://www.cesenvironmental.com  
TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

**SECTION 1: Material Producer Information**

Company: Flow Tek  
Address: 11850 Tanner Rd  
City, State, Zip: Houston, TX 77041  
Contact: Greg Patterson Title: Management  
Phone No: 832-912-2300 Fax No: 832-912-2300  
24/hr Phone: 832-812-2300  
U.S. EPA I.D. No: NA  
State I.D. NA SIC Code:

**SECTION 2: Billing Information – ☒ Same as Above**

Company:  
Address:  
City, State, Zip:  
Contact: Title:  
Phone No: Fax No:

**SECTION 3: General Description of the Material / Product**

Name of Material / Product: Used Oil

Detailed Description of Process Generating or Producing the Material / Product: Used oil from forklifts and equipment

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: Varies

Odor: None

Specific Gravity (water=1): 7-.8

Density: 7.5 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☐ Single-phase ☒ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Container Size: 55

Frequency: ☐ Weekly ☐ Monthly ☒ Quarterly ☐ Yearly

Number of Units (containers): 1 Other: \_\_\_\_\_

Proper U.S. DOT Shipping Name: Recyclable Used Oil

Class: Na UN/NA: Na PG: Na RQ: Na

Flash Point >200	pH Na	N/A	N/A	Solids 0%
Oil&Grease >150mg/l	TOC Namg/l	Zinc Namg/l	Copper Namg/l	Nickel Namg/l

#### **SECTION 4: Physical and Chemical Data**

COMPONENTS TABLE	Concentration	Units
The material / product consists of the following materials	Ranges are acceptable	or %
Used Hydraulic Oils	100	%

#### **SECTION 5: Safety Related Data**

If the handling of this material / product requires the use of special protective equipment, please explain.  
Level D PPE

#### **SECTION 6: Attached Supporting Documents**

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.  
Generator Knowledge

#### **SECTION 7: Incompatibilities**

Please list all incompatibilities (if any):

None

#### **SECTION 8: Material Producer's Certification**

The information contained herein is based on ☐ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_ Date: 7-28-08

Printed Name/Title: No Signature Required

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: <u>Robert Tharg</u>	
Date: <u>7-28-08</u>	Approved <input checked="" type="radio"/> Rejected <input type="radio"/>
Approval Number: <u>2918</u>	



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

\$40/dm

**2. Contamination Limits (maximum limit before surcharges apply):**

Fails Chlor-D-Tect

**3. Surcharge Pricing:**

None

**4. Special Testing Requirements:**

Chlor-d-Tect  
Used Oil Tests to make sure it fits with what we have. Base or Black

**5. Treatment and Handling Protocol:**

Used Oil

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☐ Subcategory B

☐ Subcategory C

7. **Tests for Product Recovered/Recycled (if applicable):**

See 4

8. **Management for Product Recovered/Recycled (if applicable):**

Used Oil

2919  
Wilson



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/28/2008

Dear **Jesse Lopez**

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2919

**Expiration Date** 7/28/2010

**Generator:** Wilson

**Address:** 1302 Conti  
Houston, TX 77002

### Waste Information

**Name of Waste:** Unused solvent -xylene/ethyl benzene

**TCEQ Waste Code #:** Product

**Container Type:**

**Detailed Description of Process Generating Waste:**

Unused product

**Color:** clear

**Odor:** solvent like

**pH:** na

**Physical State:**

**Incompatibilities:** oxidizers

**Safety Related Data/Special Handling:**

level c

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

- MRP
- cannot be an emulsion
  - must not be water soluble
  - density must be in the .85 range.



**CES Environmental  
Services, Inc.**

GB

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

**SECTION 1: Generator Information**

Company: Wilson  
Address: 1302 Conti  
City, State, Zip: Houston, TX 77002  
Contact: Jesse Lopez Title: HSE Mgr.  
Phone No: 713-237-3700 Fax No: 713-237-3422  
24/hr Phone: CES-713-417-5737  
U.S. EPA I.D. No: TXD981913817  
State I.D. 74212 SIC Code: \_\_\_\_\_

**SECTION 2: Billing Information -- ☒ Same as Above**

Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Contact: \_\_\_\_\_ Title: \_\_\_\_\_  
Phone No: \_\_\_\_\_ Fax No: \_\_\_\_\_

**SECTION 3: General Description of the Waste**

Name of Waste: Unused Solvent-Xylene/Ethyl Benzene  
Detailed Description of Process Generating Waste: Unused product

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: clear

Odor: solvent like

Specific Gravity (water=1): .85

Density: 8 lbs/gal

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)  
Container Size: 55 gal

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☒ Yearly

Texas State Waste Code No: NA-Product

Proper U.S. DOT Shipping Name: Flammable liquids, n.o.s., 3, UN1993, PG-II

Class: 3 UN/NA: UN1993 PG: II RQ: 100

Flash Point <140	pH NA	Reactive Sulfides 0mg/l	Reactive Cyanides 0mg/l	Solids 0%
Oil&Grease <1500mg/l	TOC >1500mg/l	Zinc 0mg/l	Copper 0mg/l	Nickel 0mg/l

**SECTION 4: Physical and Chemical Data**

COMPONENTS TABLE		Concentration	Units
The waste consists of the following materials		Ranges are acceptable	or %
Xylene		40-60	%
Ethyl Benzene		40-60	%

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

Level C

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.

None-Gary Brauckman inspected the drums

**SECTION 7: Incompatibilities**

Please list all incompatibilities (if any):

oxidizers

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: ☒ X  
TCLP Volatiles: ☒ X  
TCLP Semi-Volatiles: ☒ X  
Reactivity: ☒ X  
Corrosivity: ☒ X  
Ignitability: ☒ X

**SECTION 9: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the material tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_

Date: 07/14/08

Printed Name/Title: \_\_\_\_\_

Tyler R Garacci ~~BS~~ Facility HSE Specialist

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: \_\_\_\_\_

Additional Information: \_\_\_\_\_

Date: 7-28-08

Approved ☒

Rejected ☐

Approval Number: 2919

**SECTION 10: Waste Receipt Classification Under 40 CFR 437**

Is this material a wastewater or wastewater sludge? ☐ YES ☒ NO

If 'Yes', complete this section.

***PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.***

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

- (1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.
- (2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L  
Chromium: 8.9 mg/L  
Copper: 4.9 mg/L  
Nickel: 37.5 mg/L

- (3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

#### **SECTION 11: Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.



PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

\$ 50/ drum TRANS \$70/hr + FSC

2. Contamination Limit (maximum limit before surcharges apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

Run the density. This material must not be an emulsion.  
This material must not be water soluble.  
The density must be in the .85 range.

5. Treatment and Handling Protocol:

Cutter Stock or use in tank wash

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**7. Tests for Product Recovered/Recycled (if applicable):**

--

**8. Management for Product Recovered/Recycled (if applicable)**

--

2920

Wilson



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/28/2008

Dear Jesse Lopez

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2920

**Expiration Date** 7/28/2010

**Generator:** Wilson

**Address:** 1302 Conti  
Houston, TX 77002

### Waste Information

**Name of Waste:** oil filters

**TCEQ Waste Code #:** Recycle

**Container Type:**

**Detailed Description of Process Generating Waste:**

spent oil filters from equipment fluid changes

**Color:** various

**Odor:** oil like

**pH:** neutral

**Physical State:**

**Incompatibilities:** oxidizers

**Safety Related Data/Special Handling:**

level c

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

GRB  
Must conform  
to the profile



CES Environmental  
Services, Inc.

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

GB

**SECTION 1: Generator Information**

Company: Wilson  
Address: 1302 Conti  
City, State, Zip: Houston, TX 77002  
Contact: Jesse Lopez Title: HSE Mgr.  
Phone No: 713-237-3700 Fax No: 713-237-3422  
24/hr Phone: CES-713-417-5737  
U.S. EPA I.D. No: TXD981913817  
State I.D. 74212 SIC Code:

**SECTION 2: Billing Information - ☒ Same as Above**

Company:  
Address:  
City, State, Zip:  
Contact: Title:  
Phone No: Fax No:

**SECTION 3: General Description of the Waste**

Name of Waste: Oil Filters

Detailed Description of Process Generating Waste: spent oil filters from equipment fluid changes

Physical State: ☐ Liquid ☐ Sludge ☐ Powder  
☒ Solid ☐ Filter Cake ☐ Combination

Color: Various

Odor: oil like

Specific Gravity (water=1): 1.2 rb Density: 9 lbs/gal rb

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)  
Container Size: 55 g

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☒ Yearly

Texas State Waste Code No: NA-Recyclable Material

Proper U.S. DOT Shipping Name: Non-RCRA; Non-DOT Regulated Material

Class: NA UN/NA: NA PG: NA RQ: NA

Flash Point >140	pH neutral	Reactive Sulfides 0mg/l	Reactive Cyanides 0mg/l	Solids 95-100%
Oil & Grease >1500mg/l	TOC >1500mg/l	Zinc 0mg/l	Copper 0mg/l	Nickel 0mg/l

**SECTION 4: Physical and Chemical Data**

COMPONENTS TABLE		Concentration	Units
The waste consists of the following materials		Ranges are acceptable	or %
Oil, transmission and gasoline filters		90-95	%
Rags		5-10	%

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

Level C

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.

none

**SECTION 7: Incompatibilities**

Please list all incompatibilities (if any):

oxidizers

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: ☒ X  
TCLP Volatiles: ☒ X  
TCLP Semi-Volatiles: ☒ X  
Reactivity: ☒ X  
Corrosivity: ☒ X  
Ignitability: ☒ X

**SECTION 9: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the material tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_

Date: 07/14/08

Printed Name/Title: Tyra R Garacci Facility HSE Specialist

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Robert D. [Signature]

Additional Information: \_\_\_\_\_

Date: 7-28-08 ☒ Approved ☐ Rejected

Approval Number: 2920

**SECTION 10: Waste Receipt Classification Under 40 CFR 437**

Is this material a wastewater or wastewater sludge? ☐ YES ☒ NO

If 'Yes', complete this section.

***PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.***

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

- (1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.
- (2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L  
Chromium: 8.9 mg/L  
Copper: 4.9 mg/L  
Nickel: 37.5 mg/L

- (3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

#### **SECTION 11: Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**1. Base Pricing (including freight):**

\$35/drum Trans \$70/hr + FSC

**2. Contamination Limit (maximum limit before surcharges apply):**

**3. Surcharge Pricing:**

**4. Special Testing Requirements:**

Materials in the drums must conform to the profile composition.

**5. Treatment and Handling Protocol:**

to oil filter recycler

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A    ☐ Subcategory B    ☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**7. Tests for Product Recovered/Recycled (if applicable):**

--

**8. Management for Product Recovered/Recycled (if applicable)**

--

2921

Wilson

7 E  
8-4-09  
T-35  
LAB



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/28/2008

Dear **Jesse Lopez**

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2921

**Expiration Date** 7/28/2010

**Generator:** Wilson

**Address:** 1302 Conti  
Houston, TX 77002

### Waste Information

**Name of Waste:** Oily rags and pads and booms

**TCEQ Waste Code #:** Recycle

**Container Type:**

**Detailed Description of Process Generating Waste:**

Rags, pads and booms used to clean and contain motor oil spills

**Color:** various

**Odor:** oil like

**pH:** neutral

**Physical State:**

**Incompatibilities:** oxidizers

**Safety Related Data/Special Handling:**

level c

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106001060

9HP  
No Free Liquids



CES Environmental  
Services, Inc.

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

GB

**SECTION 1: Generator Information**

Company: Wilson  
Address: 1302 Conti  
City, State, Zip: Houston, TX 77002  
Contact: Jesse Lopez Title: HSE Mgr.  
Phone No: 713-237-3700 Fax No: 713-237-3422  
24/hr Phone: CES-713-417-5737  
U.S. EPA I.D. No: TXD981913817  
State I.D. 74212 SIC Code: \_\_\_\_\_

**SECTION 2: Billing Information - ☒ Same as Above**

Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Contact: \_\_\_\_\_ Title: \_\_\_\_\_  
Phone No: \_\_\_\_\_ Fax No: \_\_\_\_\_

**SECTION 3: General Description of the Waste**

Name of Waste: Oily Rags and pads and booms

Detailed Description of Process Generating Waste: Rags, pads and booms used to clean and contain motor oil spills

Physical State: ☐ Liquid ☐ Sludge ☐ Powder  
☒ Solid ☐ Filter Cake ☐ Combination

Color: Various

Odor: oil like

Specific Gravity (water=1): 1.2 NC Density: 9 lbs/gal NC

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)  
Container Size: 55 g

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☒ Yearly

Texas State Waste Code No: NA-Recyclable Material

Proper U.S. DOT Shipping Name: Non-RCRA; Non-DOT Regulated Material

Class: NA UN/NA: NA PG: NA RQ: NA

Flash Point >140	pH <u>neutral</u>	Reactive Sulfides 0mg/l	Reactive Cyanides 0mg/l	Solids 95-100%
Oil & Grease >1500mg/l	TOC >1500mg/l	Zinc 0mg/l	Copper 0mg/l	Nickel 0mg/l

**SECTION 4: Physical and Chemical Data**

COMPONENTS TABLE		Concentration	Units
The waste consists of the following materials		Ranges are acceptable	or %
Oily Rags		100	%

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

Level C

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.

none

**SECTION 7: Incompatibilities**

Please list all incompatibilities (if any):

oxidizers

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: ☒ X  
TCLP Volatiles: ☒ X  
TCLP Semi-Volatiles: ☒ X  
Reactivity: ☒ X  
Corrosivity: ☒ X  
Ignitability: ☒ X

**SECTION 9: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the material tested are representative of all materials described by this document.

Authorized Signature: Tyrone R. Garacci Date: 07/14/08

Printed Name/Title: Tyrone R. Garacci Facility HSE Specialist

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Labellina Thayer

Additional Information: \_\_\_\_\_

Date: 7-28-08

Approved

Rejected

Approval Number: 2921

**SECTION 10: Waste Receipt Classification Under 40 CFR 437**

Is this material a wastewater or wastewater sludge? ☐ YES ☒ NO

If 'Yes', complete this section.

***PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.***

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

- (1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.
- (2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

- (3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcategory

☐ Oils Subcategory

☐ Organics Subcategory

#### **SECTION 11: Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.



PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

\$65/drum Trans \$70/hr + fsc

2. Contamination Limit (maximum limit before surcharges apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

There can be no free liquids.

5. Treatment and Handling Protocol:

send to recycler

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A    ☐ Subcategory B    ☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**7. Tests for Product Recovered/Recycled (if applicable):**

--

**8. Management for Product Recovered/Recycled (if applicable)**

Blackoil
----------

2886

Fuji Film Manufacturing USA



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Material / Product Approval Letter

Date 7/15/2008

Dear Timothy Hylla

Thank you for choosing CES Environmental Services, Inc. for your material / product recycling needs. The following material has been approved at our facility in Houston, TX. If the material received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2886

**Expiration Date** 7/15/2010

**Producer:** Fuji Film Manufacturing USA

**Address:** 211 Pockett Ferry Rd  
Greenwood, SC 29649

### Material / Product Information

**Name of Material / Product** Methanol product

**Container Type:**

### **Detailed Description of Process Generating or Producing the Material / Product:**

Manufacturing of photographic dyes - line flushing with methanol

**Color:** Yellowish to green      **Odor:** Organic/alcohol      **pH:** 4-10

**Physical State:**

**Incompatibilities:** oxidizers

**Safety Related Data/Special Handling:**

std for flammable materials

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

EPAHO106001068



4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

### SECTION 1: Generator Information

Company: Fuji Film Manufacturing U.S.A., Inc.  
Address: 211 Pockett Ferry Road  
City: Greenwood State: SC Zip: 29649  
Contact: Billie Simpson Title: Environmental Engineer  
Phone Number: 864-223-2888 Fax Number: 864-943-4650  
24/hr Phone Number: 5CD987571551  
US EPA ID No: \_\_\_\_\_  
State ID No: \_\_\_\_\_ SIC Code: 2795

### SECTION 2: Billing Information - ☐ Same as Above

Company: EMA, Inc.  
Address: 10627 Midwest Ind Blvd.  
City: St. Louis State: MO Zip: 63132  
Contact: Tim Hylla Title: V.P.  
Phone Number: 314-785-6425 Fax Number: 314-785-6426

### SECTION 3: General Description of the Waste

Name of Waste: Methanol Product  
Detailed Description of Process Generating Waste: mtg of photo graphic Dyes - Line Flushing with methanol

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: yellow to greenish Odor: organic/alcohol

Specific Gravity (water=1): 0.8-0.9 Density: 6.6-7.5 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☒ Monthly ☐ Yearly ☐ One-Time

Quantity: 6,500 - 12,000

☐ Yes ☒ No

**If "Yes", is it:**

☐ D001 (Ignitable)

☐ D002 (Corrosive)☐ D003 (Reactive)

☐ D004

☐ D005

☐ D006

☐ D007

☐ D008

☐ 0009

☐ D010

☐ D011

**Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)**

☐ Yes☒ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No

**If "Yes", then please list ALL applicable codes:**

**Texas State Waste Code Number:**

Product

**Proper US DOT Shipping Name:**

Methanol

Class: 3.67 UN/NA: UN1230 PG: II RQ: EDRD

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
2140		4 to 10		0 mg/l		0 mg/l		22 %	
Oil & Grease		TOC		Zinc		Copper		Nickel	
0 mg/l		0 mg/l		0 mg/l		0 mg/l		0 mg/l	

#### SECTION 4: Physical and Chemical Data

[illegible]

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

no stel

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.

MSDS Attached

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

NONE OXIDIZING

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	<u>X</u>
TCLP Volatiles:	<u>X</u>
TCLP Semi-Volatiles:	<u>X</u>
Reactivity:	<u>X</u>
Corrosivity:	<u>X</u>
Ignitability:	<u>X</u>

**SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)**

Is this material a wastewater or wastewater sludge?  
If 'Yes', complete this section.

☐ YES ☒ NO

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.**

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
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- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
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- ☐ Used oils
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- ☐ Coolants
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- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
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- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
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**Organics Subcategory: Subpart C**

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- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

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(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

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Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

**SECTION 10 Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

**SECTION 11: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☒ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Printed Name/Title: \_\_\_\_\_

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: \_\_\_\_\_

Date: \_\_\_\_\_

Approval Number: \_\_\_\_\_

☒ Approved

☐ Rejected

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. Base Pricing (including freight):

Pay 30% of METHANEX index price (less than  
1% solids, light color)  
If 2-3% solids pay 20% methanex index (or dark  
in color).

2. Contamination Limits (maximum limit before surcharges apply):

Must be at least 70% methanol by  
specific gravity and CEC table concentration.  
No more than 3% solids.

3. Surcharge Pricing:

Pay price depends on color and solids (see  
base pricing above)

4. Special Testing Requirements:

Record <sup>sp. gr.</sup> S.G., % methanol (by CEC table), % solids  
on inbound load report

5. Treatment and Handling Protocol:

product

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A

☐ Subcategory B

☐ Subcategory C

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable):

Resell as is. Do NOT DISTILL. Must be resold  
as product as is. Notify product sales of  
Specs of load.



CES ENVIRONMENTAL SERVICES USA Inc. - UHC FORM

UNDERLYING HAZARDOUS CONSTITUENTS

Date: 7/18/08

Generator: Fuji Film Manufacturing  
Address: 211 Puckett Ferry Road  
Greenwood SC 29649

Profile No. \_\_\_\_\_

The waste stream represented by the above **Profile Number** is below all of the concentration limits as indicated on table 268.48 (attached), with the exception of the D002 characteristic code and the Sulfide (D003 characteristic code, sulfide) which is circled.

Certifying Representative:

a. Tim Hella  
Print Name  
b. [Signature]  
Signature  
c. EMA, Inc.  
Company  
d. V.P.  
Title

All of a, b, c, d must be completed.

---

MSDS Number: M2015 \*\*\*\*\* Effective Date: 08/10/04 \*\*\*\*\* Supersedes: 11/12/01

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**MSDS****Material Safety Data Sheet**

From: Mallinckrodt Baker, Inc.  
222 Red School Lane  
Phillipsburg, NJ 08865



**Mallinckrodt  
CHEMICALS**



24 Hour Emergency Telephone: 908-459-2151  
CHEMTREC: 1-800-424-9300

National Response in Canada  
CANUTEC: 613-956-6666

Outside U.S. and Canada  
Chemtrec: 703-527-3887

NOTE: CHEMTREC, CANUTEC and National  
Response Center emergency numbers to be  
used only in the event of chemical emergencies  
involving a spill, leak, fire, exposure or accident  
involving chemicals.

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

---

# METHYL ALCOHOL

---

## 1. Product Identification

Synonyms: Wood alcohol; methanol; carbinol

CAS No.: 67-56-1

Molecular Weight: 32.04

Chemical Formula: CH<sub>3</sub>OH

Product Codes:

J.T. Baker: 5217, 5370, 5794, 5811, 5842, 5869, 9049, 9063, 9065, 9066, 9067, 9069, 9070,  
9071, 9073, 9075, 9076, 9077, 9091, 9093, 9096, 9097, 9098, 9263, 9822, 9830, V654

Mallinckrodt: 3004, 3006, 3016, 3017, 3018, 3024, 3041, 3701, 4295, 5160, 8814, H080,  
H488, H603, H985, V079, V571

## 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Methyl Alcohol	67-56-1	100%	Yes

## 3. Hazards Identification

<http://www.jtbaker.com/msds/englishhtml/M2015.htm>

12/1/04

**Emergency Overview**

**POISON! DANGER! VAPOR HARMFUL. MAY BE FATAL OR CAUSE BLINDNESS IF SWALLOWED. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. CANNOT BE MADE NONPOISONOUS. FLAMMABLE LIQUID AND VAPOR. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM AND LIVER.**

**SAF-T-DATA<sup>(tm)</sup> Ratings (Provided here for your convenience)**

Health Rating: 3 - Severe (Poison)  
Flammability Rating: 3 - Severe (Flammable)  
Reactivity Rating: 1 - Slight  
Contact Rating: 3 - Severe (Life)  
Lab Protective Equip: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD;  
PROPER GLOVES; CLASS B EXTINGUISHER  
Storage Color Code: Red (Flammable)

**Potential Health Effects****Inhalation:**

A slight irritant to the mucous membranes. Toxic effects exerted upon nervous system, particularly the optic nerve. Once absorbed into the body, it is very slowly eliminated. Symptoms of overexposure may include headache, drowsiness, nausea, vomiting, blurred vision, blindness, coma, and death. A person may get better but then worse again up to 30 hours later.

**Ingestion:**

Toxic. Symptoms parallel inhalation. Can intoxicate and cause blindness. Usual fatal dose: 100-125 milliliters.

**Skin Contact:**

Methyl alcohol is a defatting agent and may cause skin to become dry and cracked. Skin absorption can occur; symptoms may parallel inhalation exposure.

**Eye Contact:**

Irritant. Continued exposure may cause eye lesions.

**Chronic Exposure:**

Marked impairment of vision has been reported. Repeated or prolonged exposure may cause skin irritation.

**Aggravation of Pre-existing Conditions:**

Persons with pre-existing skin disorders or eye problems or impaired liver or kidney function may be more susceptible to the effects of the substance.

**4. First Aid Measures****Inhalation:**

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give

oxygen. Get medical attention immediately.

**Ingestion:**

Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Skin Contact:**

Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

**Eye Contact:**

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

---

## 5. Fire Fighting Measures

**Fire:**

Flash point: 12C (54F) CC

Autoignition temperature: 464C (867F)

Flammable limits in air % by volume:

lcl: 6.0; ucl: 36

Flammable Liquid and Vapor!

**Explosion:**

Above flash point, vapor-air mixtures are explosive within flammable limits noted above. Moderate explosion hazard and dangerous fire hazard when exposed to heat, sparks or flames. Sensitive to static discharge.

**Fire Extinguishing Media:**

Use alcohol foam, dry chemical or carbon dioxide. (Water may be ineffective.)

**Special Information:**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Use water spray to blanket fire, cool fire exposed containers, and to flush non-ignited spills or vapors away from fire. Vapors can flow along surfaces to distant ignition source and flash back.

---

## 6. Accidental Release Measures

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer! If a leak or spill has not ignited, use water spray to disperse the vapors, to protect personnel attempting to stop leak, and to flush spills away from exposures. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

J. T. Baker SOLUSORB® solvent adsorbent is recommended for spills of this product.

---

## 7. Handling and Storage

Protect against physical damage. Store in a cool, dry well-ventilated location, away from any area where the fire hazard may be acute. Outside or detached storage is preferred. Separate from incompatibles. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be No Smoking areas. Use non-sparking type tools and equipment, including explosion proof ventilation. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product. Do Not attempt to clean empty containers since residue is difficult to remove. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, sparks, flame, static electricity or other sources of ignition: they may explode and cause injury or death.

---

## 8. Exposure Controls/Personal Protection

### Airborne Exposure Limits:

For Methyl Alcohol:

- OSHA Permissible Exposure Limit (PEL):

200 ppm (TWA)

- ACGIH Threshold Limit Value (TLV):

200 ppm (TWA), 250 ppm (STEL) skin

### Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details. Use explosion-proof equipment.

### Personal Respirators (NIOSH Approved):

If the exposure limit is exceeded and engineering controls are not feasible, wear a supplied air, full-facepiece respirator, airlined hood, or full-facepiece self-contained breathing apparatus. Breathing air quality must meet the requirements of the OSHA respiratory protection standard (29CFR1910.134). This substance has poor warning properties.

### Skin Protection:

Rubber or neoprene gloves and additional protection including impervious boots, apron, or coveralls, as needed in areas of unusual exposure.

### Eye Protection:

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

---

## 9. Physical and Chemical Properties

**Appearance:**

Clear, colorless liquid.

**Odor:**

Characteristic odor.

**Solubility:**

Miscible in water.

**Specific Gravity:**

0.8

**pH:**

No information found.

**% Volatiles by volume @ 21C (70F):**

100

**Boiling Point:**

64.5C (147F)

**Melting Point:**

-98C (-144F)

**Vapor Density (Air=1):**

1.1

**Vapor Pressure (mm Hg):**

97 @ 20C (68F)

**Evaporation Rate (BuAc=1):**

5.9

---

## 10. Stability and Reactivity

**Stability:**

Stable under ordinary conditions of use and storage.

**Hazardous Decomposition Products:**

May form carbon dioxide, carbon monoxide, and formaldehyde when heated to decomposition.

**Hazardous Polymerization:**

Will not occur.

**Incompatibilities:**

Strong oxidizing agents such as nitrates, perchlorates or sulfuric acid. Will attack some forms of plastics, rubber, and coatings. May react with metallic aluminum and generate hydrogen gas.

**Conditions to Avoid:**

Heat, flames, ignition sources and incompatibles.

---

## 11. Toxicological Information

Methyl Alcohol (Methanol) Oral rat LD50: 5628 mg/kg; inhalation rat LC50: 64000

<http://www.jtbaker.com/msds/englishhtml/M2015.htm>

12/1/04

ppm/4H; skin rabbit LD50: 15800 mg/kg. Irritation data-standard Draize test: skin, rabbit: 20mg/24 hr. Moderate; eye, rabbit: 100 mg/24 hr. Moderate. Investigated as a mutagen, reproductive effector.

-----\Cancer Lists\-----			
Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Methyl Alcohol (67-56-1)	No	No	None

## 12. Ecological Information

### Environmental Fate:

When released into the soil, this material is expected to readily biodegrade. When released into the soil, this material is expected to leach into groundwater. When released into the soil, this material is expected to quickly evaporate. When released into the water, this material is expected to have a half-life between 1 and 10 days. When released into water, this material is expected to readily biodegrade. When released into the air, this material is expected to exist in the aerosol phase with a short half-life. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into air, this material is expected to have a half-life between 10 and 30 days. When released into the air, this material is expected to be readily removed from the atmosphere by wet deposition.

### Environmental Toxicity:

This material is expected to be slightly toxic to aquatic life.

## 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved incinerator or disposed in a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

## 14. Transport Information

### Domestic (Land, D.O.T.)

Proper Shipping Name: METHANOL

Hazard Class: 3

UN/NA: UN1230

Packing Group: II

Information reported for product/size: 358LB

6.1

<http://www.jtbaker.com/msds/englishhtml/M2015.htm>

12/1/04

International (Water, I.M.O.)

Proper Shipping Name: METHANOL

Hazard Class: 3, 6.1

UN/NA: UN1230

Packing Group: II

Information reported for product/size: 358LB

## 15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----				
Ingredient	TSCA	EC	Japan	Australia
Methyl Alcohol (67-56-1)	Yes	Yes	Yes	Yes

-----\Chemical Inventory Status - Part 2\-----				
Ingredient	Korea	DSL	NDSL	Phil.
Methyl Alcohol (67-56-1)	Yes	Yes	No	Yes

-----\Federal, State & International Regulations - Part 1\-----				
Ingredient	-SARA 302- RQ	TPQ	-SARA 313- List	Chemical Catg.
Methyl Alcohol (67-56-1)	No	No	Yes	No

-----\Federal, State & International Regulations - Part 2\-----			
Ingredient	CERCLA	-RCRA- 261.33	-TSCA- 8(d)
Methyl Alcohol (67-56-1)	5000	U154	No

Chemical Weapons Convention: No    TSCA 12(b): No    CDTA: No  
SARA 311/312: Acute: Yes    Chronic: Yes    Fire: Yes    Pressure: No  
Reactivity: No    (Pure / Liquid)

Australian Hazchem Code: 2PE

Poison Schedule: S6

WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

## 16. Other Information

NFPA Ratings: Health: 1 Flammability: 3 Reactivity: 0

<http://www.jtbaker.com/msds/englishhtml/M2015.htm>

12/1/04

**Label Hazard Warning:**

POISON! DANGER! VAPOR HARMFUL. MAY BE FATAL OR CAUSE BLINDNESS IF SWALLOWED. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. CANNOT BE MADE NONPOISONOUS. FLAMMABLE LIQUID AND VAPOR. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM AND LIVER.

**Label Precautions:**

Avoid breathing vapor.  
Avoid contact with eyes, skin and clothing.  
Wash thoroughly after handling.  
Keep container closed.  
Use only with adequate ventilation.  
Keep away from heat, sparks and flame.

**Label First Aid:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. In all cases get medical attention immediately.

**Product Use:**

Laboratory Reagent.

**Revision Information:**

No Changes.

**Disclaimer:**

\*\*\*\*\*

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\*\*\*\*\*

Prepared by: Environmental Health & Safety  
Phone Number: (314) 654-1600 (U.S.A.)

2887  
Prolen South west



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/15/2008

Dear Leslie Smith

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2887

**Expiration Date** 7/15/2010

**Generator:** Proler Southwest  
**Address:** 90 Hirsch Rd  
Houston, TX 77052

### Waste Information

**Name of Waste:** Used oil filters

**TCEQ Waste Code #:** Recycle

**Container Type:**

**Detailed Description of Process Generating Waste:**

Used oil filters from trucks

**Color:** dark brown

**Odor:** hydrocarbon

**pH:** 6-9

**Physical State:**

**Incompatibilities:** oxidizers

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

GRP



4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

DB  
will enter  
pricing  
PFI

**SECTION 1: Generator Information**

Company: Proler Southwest  
Address: 90 Hirsch Rd  
City: Houston State: TX Zip: 77052  
Contact: Leslie Smith Title:  
Phone Number: 713-671-2900 Fax Number: 713-671-9292  
24/hr Phone Number:  
US EPA ID No: na  
State ID No: na SIC Code: na

**SECTION 2: Billing Information -** ☐ Same as Above

Company: Proler Southwest  
Address: PO Box 53028  
City: Houston State: TX Zip: 77052  
Contact: Title:  
Phone Number: Fax Number:

**SECTION 3: General Description of the Waste**

Name of Waste: Used oil filters  
Detailed Description of Process Generating Waste: used oil filters from trucks

Physical State: ☐ Liquid ☐ Sludge ☐ Powder  
☒ Solid ☐ Filter Cake ☐ Combination

Color: dark brown Odor: hydrocarbon

Specific Gravity (water=1): na Density: na lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☐ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☒ Monthly ☐ Yearly ☐ One-Time

Quantity: 6-7

☐ Yes ☒ No

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

☐ D004    ☐ D005    ☐ D006    ☐ D007    ☐ D008    ☐ D009  
☐ D010    ☐ D011

**Characteristic for Toxic Organics: D012 thru D043** (please list all that apply)

☐ Yes ☒ No

If "Yes", then please list ALL applicable codes:

☐ Yes ☒ No

If "Yes", then please list ALL applicable codes:

recycle

Non-RCRA Non-regulated material (recyclable oil filters)

**Class:** na **UN/NA:** na **PG :** na **RQ:** na

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>200		6-9		0 <u>mg/l</u>		0 <u>mg/l</u>		100 %	
Oil & Grease		TOC		Zinc		Copper		Nickel	
>1500	<u>mg/l</u>	na	<u>mg/l</u>	na	<u>mg/l</u>	na	<u>mg/l</u>	na	<u>mg/l</u>

[illegible]

JUL-01-2008 15:09

CES ENVIROMENTAL

7136710621

1.007

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

none

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. none

**SECTION 7: Incompatibilities**

Please list ALL Incompatibilities (if any):

oxldizers

**SECTION 8: Generator's Knowledge Documentation**Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:

x

TCLP Volatiles:

x

TCLP Semi-Volatiles:

x

Reactivity:

x

Corrosivity:

x

Ignitability:

x

**SECTION 9: Generator's Certification**The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature:

*Leslie C Smith*

Date:

7/2/08

Printed Name/Title:

Leslie C Smith Production Supt.

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer:

*Robyn Thayer*

Date:

7-15-08

☒ Approved☐ Rejected

Approval Number:

2887

**SECTION 10: Waste Receipt Classification Under 40 CFR 437**

Is this material a wastewater or wastewater sludge?

☐ YES ☒ NO

If 'Yes', complete this section.

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.**

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcategory

☐ Oils Subcategory

☐ Organics Subcategory

**SECTION 11: Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**1. Base Pricing (including freight):**

\$20/drum

**2. Contamination Limit (maximum limit before surcharges apply):**

**3. Surcharge Pricing:**

**4. Special Testing Requirements:**

not tests are required other than making sure contents meet profile

**5. Treatment and Handling Protocol:**

process to Atlantic industrial , must process to a recycler.

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☐ Subcategory B

☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**7. Tests for Product Recovered/Recycled (if applicable):**

--

**8. Management for Product Recovered/Recycled (if applicable)**

--

2888  
BW Services



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/15/2008

Dear Brandon White

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2888

**Expiration Date** 7/15/2010

**Generator:** BW Services

**Address:** 1100 Wayne Drive  
Angleton, TX 77515

### Waste Information

**Name of Waste:** Unused Alcupol F-5511

**TCEQ Waste Code #:** 00062191

**Container Type:**

**Detailed Description of Process Generating Waste:**

Unused product cleaned from rail cars from a railcar washout facility

**Color:** colorless

**Odor:** odorless

**pH:** na

**Physical State:**

**Incompatibilities:** oxidizers

**Safety Related Data/Special Handling:**

level d ppe

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

JRP

**CES Environmental  
Services, Inc.**

4904 Griggs Road Houston, TX 77021

Phone: (713) 676-1460

Fax: (713) 676-1676

http://www.cesenvironmental.com

TCEQ Industrial Solid Waste Permit No: 30948

U.S. EPA ID No: TXD008950461 ISWR No: 30900

DB  
Need MSDS  
PFI**SECTION 1: Material Producer Information**

Company: BW Services

Address: 1100 Wayne Drive

City, State, Zip: Angleton, TX 77515

Contact: Brandon Douglas

Title:

Phone No: 979-848-8800

Fax No: 979-848-9990

24/hr Phone: 281-734-8478

U.S. EPA I.D. No: TXD08950461

State I.D. 30207

SIC Code:

**SECTION 2: Billing Information - ☒ Same as Above**

Company:

Address:

City, State, Zip:

Contact:

Title:

Phone No:

Fax No:

**SECTION 3: General Description of the Material / Product**Name of Material / Product: Unused Alcopol E-5511Detailed Description of Process Generating or Producing the Material / Product: Unused product cleaned from railcars from a rail car wash out facility.Physical State: ☒ Liquid☐ Sludge☐ Powder☐ Solid☐ Filter Cake☐ CombinationColor: ColorlessOdor: OdourlessSpecific Gravity (water=1): 1.019Density: 8.9 lbs/galDoes this material contain any total phenolic compounds? ☐ Yes ☒ NoDoes this material contain any para substituted phenolic compounds? ☐ Yes ☒ NoLayers: ☒ Single-phase☐ Multi-phaseContainer Type: ☒ Drum☐ Tote☐ Truck☐ Other (explain)Container Size: 55 galFrequency: ☐ Weekly☒ Monthly☐ Quarterly☐ YearlyNumber of Units (containers): 1-30

Other: \_\_\_\_\_

Proper U.S. DOT Shipping Name:

000621A1  
Non RCRA, Non DOT Regulated Waste LiquidClass: Na

UN/NA:

Na

PG:

Na

RQ:

Na

Flash Point >160	pH Na	N/A	N/A	Solids 0%
Oil & Grease Nmg/l	TOC Nmg/l	Zinc Nmg/l	Copper Nmg/l	Nickel Nmg/l

**SECTION 4: Physical and Chemical Data**

COMPONENTS TABLE	Concentration	Units
The material / product consists of the following materials	Ranges are acceptable	or %
Alcupol F-6511	100	%

**SECTION 5: Safety Related Data**

If the handling of this material / product requires the use of special protective equipment, please explain.

Level D PPE

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.

MSDS Sheets

**SECTION 7: Incompatibilities**

Please list all incompatibilities (if any):

Oxidizers

**SECTION 8: Material Producer's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_

Date: 6-25-08

Printed Name/Title: \_\_\_\_\_

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Technical Manager: \_\_\_\_\_

Date: 7-15-08

Approved

Rejected

Approval Number: \_\_\_\_\_

2888



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

\$75/dm

**2. Contamination Limits (maximum limit before surcharges apply):**

Na

**3. Surcharge Pricing:**

None, reject if not applicable to profile.

**4. Special Testing Requirements:**

Na

**5. Treatment and Handling Protocol:**

Put in Class 1 solids box with other solids to absorb (IE absorbent, dirt, etc.)

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☐ Subcategory B

☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**7. Tests for Product Recovered/Recycled (if applicable):**

Na
----

**8. Management for Product Recovered/Recycled (if applicable):**

Na
----

1 Drum

# MATERIAL SAFETY DATA SHEET

(According to Dir. 93/112/EC)

ALCUPOL F-5511 (for flexible foam)

1. PRODUCT IDENTIFICATION		
<b>Company:</b> REP3OL QUÍMICA S.A.  <b>Address:</b> Pº de la Castellana, 280 28046 MADRID  <b>Tel. # 91 348 80 00</b> <b>Fax # 91 348 94 94</b>	<b>Commercial name:</b> ALCUPOL F-5511 (for flexible foam) <b>Chemical name:</b> Polyol ether.	
	<b>Synonyms:</b>	
<b>Emergency telephone:</b> Puertollano: 920 41 05 07 Instituto Nacional de Toxicología: Emergency telephone: 91 562 04 20	<b>Molecular formula:</b> NP	<b>CAS #</b> 9082-00-2
	<b>EC (EINECS) #</b> NP	<b>Annex I (Dir. 67/548/EEC) #</b> NP

2. COMPOSITION			
<b>General composition:</b> Polyol ether stabilized with additives.			
Dangerous components:	Range %	Classification	
		R	S
NP			

3. HAZARD IDENTIFICATION	
PHYSICAL / CHEMICAL	TOXICITY / SYMPTOMS
The product may burn in fire.	<b>Inhalation:</b> NP  <b>Ingestion/aspiration:</b> The product may cause gastrointestinal disorders.  <b>Contact (skin/eyes):</b> Contact with skin may cause irritation. In contact with eyes, the product causes slight transient pain and irritation similar to that caused by mild soap.  <b>General toxic effects:</b> The product is slightly irritant to eyes and skin.

ALCUPOL F-5511 (for flexible foam)

Rev.: 1.2

Date: 18<sup>th</sup> January 2004

Doc.: 40/7073/6Q.21

1 of 7

EPAHO106001099

#### 4. FIRST AID

**Inhalation:** NP

**Ingestion/aspiration:** If the product is swallowed and the affected person is conscious, have affected person drink water or milk. Call for medical attention.

**Contact skin and eyes:** In case of contact with the product, wash skin area with plenty of hot water and soap. In contact with eyes, hold eyelids open and immediately flush with plenty of water for at least 15 minutes.

**General measures:** Call for medical attention.

#### 5. FIRE-FIGHTING MEASURES

**Extinguishing agents:** Dry chemicals, CO<sub>2</sub> and water spray.

**Non suitable extinguishing agents:** Water applied directly may disperse the material.

**Combustion products:** CO<sub>2</sub>, H<sub>2</sub>O, CO (in defect of air).

**Special measures:** NP

**Special hazards:** The product does not ignite easily; however it burns in fire.

**Protective equipment:** Heat-resistant suit and gloves. Self-contained breathing apparatus because heavy fumes are produced.

#### 6. ACCIDENTAL RELEASE MEASURES

**Precautions for the environment:** Keep the product away from animals, rivers and water sources. Hazard of physical fouling in case of accidental releases.

**Personal precautions:** Keep unnecessary people away. Avoid prolonged contact with liquid product wearing suitable protective clothing.

**Cleanup methods:**  
**Liquid spillages:** Take up with dry sand or other non-combustible adsorbent material and place into containers for later disposal.

**Personal protection:** Wear suitable protective clothing, gloves, and safety goggles or face-shield.

**Liquid spillages:** Dike far ahead of liquid spillage and mop up with vacuum equipment and containers for later disposal.

## 7. HANDLING AND STORAGE

### Handling:

**General precautions:** Wear protective clothing to avoid prolonged contact with the product. Do not smoke, drink, or eat during handling. Good personal hygiene procedures must be observed. Do not handle damaged containers unless wearing appropriate protective equipment to avoid direct contact.

**Specific conditions:** In operations filling or handling containers use appropriate impervious suits, gloves, shoes and safety goggles or face-shield to prevent splashes. During transfer avoid contact with air, use pumps and connections properly earthed to prevent generation of electrostatic charges.

For more information consult technical information.

### Storage:

**Temperature and decomposition products:** The product is stable at normal storage conditions.

**Decomposition products:** NP

**Storage conditions:** It must be stored in steel or polyethylene containers, properly labelled and sealed, placed in cool, well ventilated areas. Protect containers against the inclemencies of the weather. The product is hygroscopic therefore it must be kept away from moisture.

**Incompatible materials:** Oxidant compounds.

## 8. PERSONAL PROTECTION/EXPOSURE CONTROLS

### Personal protection:

**Respiratory protection:** NP

**Eye protection:** Safety goggles or face-shield to avoid contact with splashes.

**Skin protection:** Gloves and appropriate protective clothing.

**Other protective equipment:** Showers and eye-washers in working area.

Do not breathe vapours, fumes or dusts from the product.

**Specific hygiene measures:** Care should be taken to ensure proper skin cleaning by washing thoroughly with soap and hot water, followed by the application of a skin re-conditioning cream. Do not use solvent-based skin cleaner.

### Exposure controls:

9. PHYSICAL AND CHEMICAL PROPERTIES	
Appearance: Liquid	pH:
Colour: Colourless	Odour: Odourless
Boiling range: NP	Melting point:
Flash point: 246 °C (ASTM D92-56)	Autoignition temperature:
	Oxidizing properties: NP
Vapour pressure:	Density: 1.019 g/cm <sup>3</sup> at 25 °C
Vapour density:	Octanol/Water partition coefficient:
Surface tension:	Critical temperature:
Water solubility: Insoluble.	Solubility: Alcohols, ethers, ketones, aromatic hydrocarbons and halogenated solvents.
Viscosity: 400 cp at 25 °C Average molecular weight: 3000	Hydrolysis: 15 mg KOH/g Fire point: 268 °C (ASTM D92-56) Cloud point: 40 °C

10. STABILITY AND REACTIVITY	
Stability: Stable under normal conditions.	Conditions to avoid: High temperatures and moisture.
Reactivity: No reaction with oxidizing agents.	
Hazardous decomposition products: NP	
Polymerization risk: NP	Conditions to avoid: NP

## 11. TOXICOLOGICAL INFORMATION

**Routes of exposure:** Contact with skin and eyes. Ingestion is easy to prevent and not frequent.

**Acute and chronic effects:** The product is slightly irritant to eyes and skin.  
**LD<sub>50</sub>** >10 g/Kg (oral-rat); **LD<sub>50</sub>**: 5-30 g/Kg (skin-rabbit).

**Carcinogenicity:** NP

**Dermatologic toxicity:** NP

**Medical conditions which increase hazard to exposure:** Dermatological problems.

## 12. ECOLOGICAL INFORMATION

### Pollutant potential:

**Persistence and degradability:** There is no data available concerning the persistence and degradability of the product in the environment.

**Mobile/bioaccumulative potential:** There is no data available on the bioaccumulation for the product. According to the molecular structure accumulation of the product in living organisms is not expected.

**Ecotoxicological effects:** No data available on the ecotoxicological effects. Physical hazards are the major ecological problems expected.

## 13. DISPOSAL CONSIDERATIONS

**Disposal methods (surplus):** Recycling and recovery the product if possible.

**Waste:** Industrial processes or other uses.

**Storage:** Controlled environment.

**Handling:** Labeled and sealed containers. Minimize contact with the product.

**Community provisions:** Companies which recover, dispose, store, transport or handle waste should comply with Dir. 91/156/EEC on waste or other local, national or community provisions.

14. TRANSPORT INFORMATION	
Special precautions: Transport in properly sealed and labelled containers.	
Additional information:	ADR / RID: NP
UN number: NP	IATA-DGR: NP
Hazard identification number: NP	IMDG: NP

15. REGULATORY INFORMATION	
CLASSIFICATION	LABELLING
NP	Symbols: NP
	Phrases R: NP
	Phrases S: NP
Other regulations: The product is listed in TSCA Chemical Inventory (EPA).	

## 16. OTHER INFORMATION

### Data bases consulted:

EINECS: European Inventory of Existing Commercial Substances.  
 HSDB: US National Library of Medicine  
 RTECS: US Dept. of Health & Human Services.

### Legislation consulted:

Dir. 67/548/EEC of dangerous substances (including amendments and adaptations in force).  
 Dir. 1999/45/EC of dangerous preparations (including amendments and adaptations in force).  
 Dir. 91/689/EEC dangerous waste; Dir. 91/156/EEC waste management.  
 Royal Decree 363/95: Regulation about notification of new substances and classification, packaging and labelling of dangerous substances.  
 Royal Decree 255/2003: Regulation about classification, packaging and labelling of dangerous preparations.  
 European Agreement concerning the international carriage of dangerous goods by road (ADR).  
 Regulation on the international transport of dangerous goods on the railway. (RID).  
 International maritime code of dangerous goods. (IMDG)  
 International Air Transport Association (IATA) regulation pertaining to air shipment.

### GLOSSARY:

CAS: Chemical Abstract Service  
 IARC: International Agency for Research on Cancer  
 TLV: Threshold Limit Value  
 TWA: Time Weighted Average  
 STEL: Short-Term Exposure Level  
 REL: Reasonable Exposure Limit  
 PEL: Permissible Exposure Limit

VLA: Valor Limite Ambiental  
 LD<sub>50</sub>: Lethal Dose Medium  
 LC<sub>50</sub>: Lethal Concentration Medium  
 EC<sub>50</sub>: Effective Concentration Medium  
 IC<sub>50</sub>: Inhibitory Concentration Medium  
 BOD: Biological Oxygen Demand  
 NP: Not Pertinent  
 | : Changes from the last revision.

The information given in this document has been compiled based on the best existing information sources, latest available knowledge and according to the current requirements on classification, packaging and labelling of hazardous substances. It does not imply the information is exhaustive or accurate in all cases. It is the user's responsibility to determine the validity of the information contained in this Material Safety Data Sheet to apply depending on the case.

2889  
Farouk Systems



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/22/2008

Dear Casey Dippel

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2889

**Expiration Date** 7/22/2010

**Generator:** Farouk Systems

**Address:** 250 Pennbright  
Houston, TX 77090

### Waste Information

**Name of Waste:** Off-spec RCD 7108

**TCEQ Waste Code #:** CESQ1191

**Container Type:** 6 gallon

**Detailed Description of Process Generating Waste:**

Unused offspec RCD 7108

**Color:** red

**Odor:** none

**pH:** 5-9

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

LRP



**CES Environmental  
Services, Inc.**

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
http://www.cesenvironmental.com  
TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

DB  
Waste Code 7

**SECTION 1: Material Producer Information**

Company: Farouk Systems  
Address: 250 Pennbriht  
City, State, Zip: Houston, TX 77090  
Contact: Casey Dippel Title: HSE Manager  
Phone No: 281-876-2000 Fax No: 281-874-3020  
24/hr Phone:  
U.S. EPA I.D. No:  
State I.D. SIC Code:

**SECTION 2: Billing Information - ☒ Same as Above**

Company:  
Address:  
City, State, Zip:  
Contact: Title:  
Phone No: Fax No:

**SECTION 3: General Description of the Material / Product**

Name of Material / Product: Off spec RCD 7108  
Detailed Description of Process Generating or Producing the Material / Product: Unused, off spec RCD-7108

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: Red Odor: None

Specific Gravity (water=1): 1-1.1 Density: 8.3-9 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☐ Truck ☒ Other (explain)  
Container Size: 5-gallon

Frequency: ☐ Weekly ☐ Monthly ☒ Quarterly ☐ Yearly  
Number of Units (containers): 14 Other: CESQ1191

Proper U.S. DOT Shipping Name: Non-RCRA, Non DOT Regulated Waste Liquids

Class: Na UN/NA: Na PG: Na RQ: Na

Flash Point >200	pH 5-9	N/A	N/A	Solids 0%
Oil & Grease Nmg/l	TOC Nmg/l	Zinc Nmg/l	Copper Nmg/l	Nickel Nmg/l

#### SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	Concentration	Units
The material / product consists of the following materials	Ranges are acceptable	or %
RCD-7108	100	%

#### SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.

Lev PPE

#### SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.

MSDS Sheets

#### SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

None

#### SECTION 8: Material Producer's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature:

*Casey Dippel*

Date:

7/9/08

Printed Name/Title:

Casey Dippel

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: <i>[Signature]</i>	
Date: 7-22-08	Approved <input checked="" type="checkbox"/> Rejected <input type="checkbox"/>
Approval Number: <del>2828</del> 2889	

**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

\$30/5 gal bucket  
Trans \$69/hr plus fsc

**2. Contamination Limits (maximum limit before surcharges apply):**

Na

**3. Surcharge Pricing:**

Na

**4. Special Testing Requirements:**

Make sure it fits MSDS

**5. Treatment and Handling Protocol:**

2 options- Shred and put into class 1 box — make sure material is compatible w/ solids or liquids.  
or open and put liquid onto newpark truck

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☒ Subcategory B

☐ Subcategory C

**7. Tests for Product Recovered/Recycled (if applicable):**

Na

**8. Management for Product Recovered/Recycled (if applicable):**

Na

# Sun Chemical Corporation

## MATERIAL SAFETY DATA SHEET

Product: RCD-7108  
Page: 1  
MSDS: 104 Version: 1  
Issue Date: 01/01/03  
Date: 01/01/03

### 1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

PRODUCT CODE: RCD-7108  
CHEMICAL FAMILY: WATER, PIGMENT, SURFACTANT  
PRODUCT DESCRIPTION: SURFACTANT BASED AQUEOUS DISPERSION  
PRODUCT NAME: SPECIALTY BARIUM LITHOL RED DISPERSION

10-0155

#### USE DESCRIPTION

Aqueous pigment dispersions are unique, highly colored products incorporating high pigment loading with typically low levels of resin or surfactant. They are used primarily in the coloration of printing inks, paints, and coatings in water borne systems.

MANUFACTURER:  
Sun Chemical Corporation  
Dispersions Division  
3922 Bach-Buxton Road  
Amelia, Ohio 45102  
U.S.A.

EMERGENCY TELEPHONE NUMBERS:  
Transportation: (513) 753-9550  
8:30 a.m. - 5:00 p.m.: Ext .242  
or Ext .249

Telephone Numbers  
General Info: (513) 753-9550  
Toll Free: (800) 321-3946  
Fax: (513) 753-8374

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

TSRN 00195201005-5017P	C.A.S.#	*CONFIDENTIAL
TSRN 00195201005-5103P	C.A.S.#	-CONFIDENTIAL
Barium Lithol Red 49:1	C.A.S.#	1103-38-4
Water	C.A.S.#	7732-18-5

### 3. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW:

#### CAUTION!

Do not allow large amounts to enter sewers, lakes, streams, or other natural waterways. This product contains a surfactant which can cause foaming and may be toxic to aquatic life.

#### POTENTIAL HEALTH EFFECTS:

This dispersion is mildly irritating to the eyes. Avoid eye contact.

(Continued on Page: 2)

EPAHO106001112

# MATERIAL SAFETY DATA SHEET

Product: RCD-7108  
Page: 2  
MSDS: 104 Version: 1  
Issue Date: 01/01/03  
Date: 01/01/03

## 4. FIRST AID MEASURES

### EYE CONTACT

Immediately flush eyes thoroughly with large amounts of water for at least fifteen minutes if contact occurs. Seek medical attention.

### SKIN CONTACT

Wash skin with soap and water. Remove severely contaminated clothing and clean before reuse. Seek medical attention in the unlikely event that irritation develops.

### INHALATION

If exposed to excessive levels of vapors, remove to fresh air and seek medical attention if breathing is difficult or other symptoms develop.

### INGESTION

Do not give anything by mouth to an unconscious person. Do not induce vomiting. Get immediate medical attention.

## 5. FIRE FIGHTING MEASURES

Nonflammable aqueous pigment dispersion.

### Extinguishing Media

Carbon dioxide, dry chemical or foam recommended. Apply water spray to keep exposed containers cool.

### Special Fire-Fighting Procedures

Self-contained breathing apparatus (SCBA) and full protective equipment recommended.

### Unusual Fire and Explosion Hazards

Fire or excessive heat may produce hazardous decomposition products.

### General Hazard

In the unlikely event that all of the water is evaporated, improper handling of any dry organic pigment product may lead to dust cloud formation which can be an explosion hazard.

### Flammability Data

Flash Point:

Non-flammable material

Flammability Limits:

Not applicable

Autoignition Temperature:

Not applicable

### NFPA RATINGS

Health: 2

Flammability: 1

Reactivity: 0

### HMIS RATINGS

Health: 2

Flammability: 1

Reactivity: 0

## 6. ACCIDENTAL RELEASE MEASURES

### Small Spill

Contain spill immediately. Inert materials such as dry sand or sawdust may be used to help absorb any spilled material. Scoop or shovel into appropriate waste containers for disposal purposes. Soap and water may be used as necessary.

### Large Spill

Contain spilled material immediately. Use an inert material such as dry sand, sawdust, or earth to help absorb large spills. Scoop or shovel waste material into drums. Prevent runoff from entering into storm sewers, lakes, streams,

(Continued on Page: 3)

# MATERIAL SAFETY DATA SHEET

Product: RCD-7108  
Page: 3  
MSDS: 104 Version: 1  
Issue Date: 01/01/03  
Date: 01/01/03

## 6. ACCIDENTAL RELEASE MEASURES (Continued)

or other natural waterways. Large spills may be toxic to aquatic life, and can cause foaming and operational problems at wastewater treatment facilities. Appropriate protective clothing should be worn to prevent employee exposure.

## 7. HANDLING AND STORAGE

### Handling

Avoid employee exposure through the use of appropriate engineering controls, adequate personal protective equipment, and good industrial hygiene practices. Wash thoroughly after handling. Handle in well ventilated work space, and do not allow contact with the skin or eyes.

### Storage

Store in a moderately cool, dry, well-ventilated area away from direct sources of heat. Avoid freezing(32°F). Empty containers may contain product residues and should be handled accordingly. Position containers so that any labelling information is visible. Keep containers closed.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Engineering Controls

The use of local exhaust ventilation is recommended to control emissions near the source. Additional engineering controls should be used as necessary.

### Personal Protection

Safety glasses with side shields, or goggles, are recommended. Impervious clothing should be worn when gross contact is likely, such as when cleaning up large spills. Respiratory protection is generally not required. Wash at the end of each work shift. Any contaminated clothing should be removed and laundered.

### Exposure Limits

There are no ACGIH TLV's or OSHA PEL's established for this product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Red, opaque liquid  
COLORANT: Pigment Red 49:1  
SPECIFIC GRAVITY: 1.1-1.4  
SOLUBILITY IN WATER: Dispersible  
BOILING POINT: 65-100°C  
VOLATILE ORGANIC COMPOUNDS (VOC's): Negligible(< 0.5%)  
pH INFORMATION: 7.0-9.0  
ODOR: Slight odor

(Continued on Page: 4)

# MATERIAL SAFETY DATA SHEET

Product: RCD-7108  
Page: 4  
MSDS: 104 Version: 1  
Issue Date: 01/01/03  
Date: 01/01/03

## 10. STABILITY AND REACTIVITY

### GENERAL:

This product is a stable compound and hazardous polymerization will not occur. Since it contains water, do not allow it to freeze.

### INCOMPATIBILITY:

Avoid strong oxidizing agents such as peroxides, chlorates, perchlorates, nitrates, and permanganates. Oxidizing materials may vigorously evolve oxygen in large amounts.

### HAZARDOUS DECOMPOSITION PRODUCTS:

When involved in a fire, burning organic pigment products may evolve noxious gases which are toxic. These compounds may include carbon monoxide, carbon dioxide, nitrous oxides, or hydrogen chloride, depending on the pigment type used in the dispersion. All of the water must be driven off first in order for this to occur.

## 11. TOXICOLOGICAL INFORMATION

### GENERAL

Based upon industry-wide experience over many years of manufacturing, aqueous dispersion products in general are considered to have a low level of toxicity. This product contains small amounts of a surfactant that is classified as an irritant. Overexposure to the liquid may result in irritation. There are no established TLV's or PEL's for this product.

### ACUTE (SHORT-TERM) TOXICITY

Eye irritation studies on similarly formulated dispersions, using FHSA's test method under 16 CFR 1500.42, indicate this material may be a mild eye irritant. Skin irritation studies were negative. The pigment portion of this product has a reported acute oral LD<sub>50</sub> value of 5 gm/kg or greater in rats.

### CHRONIC (LONG-TERM) TOXICITY

No known published data is available for this product, but it is not expected to pose a chronic health risk under conditions of normal use.

### MUTAGENICITY

No known published data is available, but it is not expected to pose a mutagenic risk under conditions of normal use.

### ROUTES OF POTENTIAL EXPOSURE

Ingestion/ Inhalation / Skin or Eye Contact

## 12. ECOLOGICAL INFORMATION

This product has not been evaluated for its ecotoxicity. However, based upon degradation studies of similarly formulated aqueous dispersions, it can be concluded that the ingredients are almost completely degraded, except for the pigment. The biodegradation of colorants under aerobic conditions is expected to be limited and there is no evidence to suggest they create any significant ecological problems when released into the

(Continued on Page: 5)

# MATERIAL SAFETY DATA SHEET

Product: RCD-7108  
Page: 5  
MSDS: 104 Version: 1  
Issue Date: 01/01/03  
Date: 01/01/03

## 12. ECOLOGICAL INFORMATION (Continued)

environment. Since pigments are generally insoluble compounds, they are believed to have minimal bioaccumulation and bioavailability characteristics. Due to the surfactant, spills of large concentrations may be toxic to aquatic wildlife if they reach waterways. No long-term effects are predicted due to the rapid breakdown of the surfactant.

Analogous dispersions tested as follows:

Rainbow trout LC <sub>50</sub> (24 hrs.):	720 mg/l
LC <sub>50</sub> (96 hrs.):	420 mg/l
Wastewater bacteria EC <sub>50</sub> (3 hrs.):	>10,000 mg/l

Only slightly dangerous to fish, invertebrates, and algae. (WGK 1)

## 13. DISPOSAL CONSIDERATIONS

### General

This product must be disposed of in accordance with all applicable federal, state and local regulations.

### Waste Management

Incineration or landfilling are recommended disposal techniques. Contact your state or local environmental agency for specific rules.

This product is not identified as a RCRA hazardous waste under 40 CFR 261, and is not regulated under CERCLA (Superfund).

## 14. TRANSPORT INFORMATION

D.O.T. SHIPPING NAME (49 CFR 172.101-102).....	Not regulated
D.O.T. HAZARD CLASS (49 CFR 172.101-102).....	None
D.O.T. LABEL.....	None
D.O.T. PLACARD.....	None
BILL OF LADING DESCRIPTION.....	Pigments NOI Liquid
CERCLA SUBSTANCE (49 CFR).....	Not regulated
REPORTABLE QUANTITY (RQ).....	None

### INTERNATIONAL

UN/NA NUMBER.....	Not regulated or classified
IMDG/IACO CLASSIFICATION.....	Not regulated or classified
IATA CLASSIFICATION.....	Not regulated or classified

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# MATERIAL SAFETY DATA SHEET

Product: RCD-7108  
Page: 6  
MSDS: 104 Version: 1  
Issue Date: 01/01/03  
Date: 01/01/03

## 15. REGULATORY INFORMATION

### OSHA Hazard Communication Standard Status

This product is considered to be a hazardous substance under OSHA's Hazard Communication Standard 29 CFR 1910.1200. It may be mildly irritating to the eyes.

### Toxic Substances Control Act (TSCA) Status

All of the ingredients of this material have been reported to the U.S. EPA and are included in the TSCA chemical inventory.

### CERCLA Reportable Quantity (RQ)

NONE (Not regulated)

### SARA Title III

Section 302 (EHS).....: NONE

Section 311/312 (Acute).....: YES

Section 313.....: Call For Details

### RCRA

Not regulated as a hazardous waste under RCRA.

### Canadian WHMIS

This material may be a controlled product under WHMIS, due to eye irritation.

### EINECS (European Economic Community)

All components of this product are in compliance with the EINECS inventory.

EINECS No.: 'LISTED

EINECS No.: \*LISTED

EINECS No.: 214-160-6

EINECS No.: 231-791-2

### CONEG Status

This product is certified to be in full compliance with CONEG Model Legislation for packaging and packaging ink components.

## 16. OTHER INFORMATION

For more information contact Product Safety at

SUN CHEMICAL CORPORATION  
COLORS GROUP  
PRODUCT SAFETY DEPARTMENT  
(513) 681-5950 EXTENSION 323

MR. JAMES M. WENKER

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Sun Chemical Corporation assumes no responsibility for personal injury or property damage caused by the material. Users assume all risks associated with the use of the material.

(Last Page)

EPAHO106001117

2890  
Green Hunter Biofuels



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Material / Product Approval Letter

Date 7/15/2008

Dear Tim Vorick

Thank you for choosing CES Environmental Services, Inc. for your material / product recycling needs. The following material has been approved at our facility in Houston, TX. If the material received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2890

**Expiration Date** 7/15/2010

**Producer:** Green Hunter Biofuels  
**Address:** 13605 Industrial Blvd  
Houston, TX 77015

### Material / Product Information

**Name of Material / Product** Oily by-product

**Container Type:**

### **Detailed Description of Process Generating or Producing the Material / Product:**

Oil by-product stream from production of biodiesel

**Color:** brown

**Odor:** hydrocarbon

**pH:** 4-9

**Physical State:**

**Incompatibilities:** oxidizers

**Safety Related Data/Special Handling:**

std 1

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

GR

If the incoming material is an emulsion then the material is non conforming.



4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

fb / AL

**SECTION 1: Generator Information**

Company: Green Hunter BioFuels Inc.  
Address: 13605 Industrial Rd  
City: Houston State: TX Zip: 77015  
Contact: Terry Wilson Title: Manager of Terminaling & Logistics  
Phone Number: 713-574-9529 Fax Number: 713-568-4444  
24/hr Phone Number: 832-331-7477  
US EPA ID No: C65Q6  
State ID No: SIC Code:

**SECTION 2: Billing Information - ☒ Same as Above**

Company:  
Address:  
City: State: Zip:  
Contact: Title:  
Phone Number: Fax Number:

**SECTION 3: General Description of the Waste**

Name of Waste: Oil By-product  
Detailed Description of Process Generating Waste:

Oil By-product stream from production of biodiesel

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: Brown Odor: hydrocarbon

Specific Gravity (water=1): (API 23) ~ 1 Density: 48 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☐ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)

Frequency: ☒ Weekly ☐ Monthly ☐ Yearly ☐ One-Time

Quantity: 40,000 gal

**Is this a USEPA “Hazardous Waste” per 40CFR 261.3?**

☐ Yes ☒ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

**Characteristic for Toxic Metals:**

☐ D004    ☐ D005    ☐ D006    ☐ D007    ☐ D008    ☐ D009  
☐ D010    ☐ D011

**Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)**

**Is this an "F" or "K" Listed waste or mixed with one?**

☐ Yes ☒ No

**If "Yes", then please list ALL applicable codes:**

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No

☐ Yes ☒ No

If "Yes", then please list ALL applicable codes:

**Texas State Waste Code Number:**

Recycle

**Proper US DOT Shipping Name:**

Class: NA UN/NA:

Non RERA / Non DOT Regulated Material  
NA PG: NA RQ: NA

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids	
1140	4-9	0 mg/l	0 mg/l	0.3	%
Oil & Grease	TOC	Zinc	Copper	Nickel	
7150 mg/l	NA mg/l	NA mg/l	NA mg/l	NA mg/l	

#### SECTION 4: Physical and Chemical Data

[illegible]

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.

CES analytical

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

oxidizing

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	<u>X</u>
TCLP Volatiles:	<u>X</u>
TCLP Semi-Volatiles:	<u>X</u>
Reactivity:	<u>X</u>
Corrosivity:	<u>X</u>
Ignitability:	<u>X</u>

**SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)**

Is this material a wastewater or wastewater sludge?  
If 'Yes', complete this section.

☒ YES ☐ NO

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.**

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☒ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☒ Oils Subcategory
- ☐ Organics Subcategory

**SECTION 10 Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

**SECTION 11: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Printed Name/Title: \_\_\_\_\_

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: \_\_\_\_\_

Date: \_\_\_\_\_

Approval Number: \_\_\_\_\_

☒ Approved

☐ Rejected

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. Base Pricing (including freight):

Purchase for \$0.15/gal. No trans fees.  
Delivered pay \$0.35/gal

2. Contamination Limits (maximum limit before surcharges apply):

Must be at least 40% oil recovered, must not  
be an emulsion.

3. Surcharge Pricing:

Contact sales if load is less than 40%  
oil

4. Special Testing Requirements:

Ash, % oil, % solids, % water, flash, TOC ~~test~~ &  
metals (water phase), chlor-d-test. Complete  
Inbound load report

5. Treatment and Handling Protocol:

Decant oil and water phases. Sell as is in the trailer.

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A

☒ Subcategory B

☐ Subcategory C

7. **Tests for Product Recovered/Recycled (if applicable):**

*See Special Testing Requirements*

8. **Management for Product Recovered/Recycled (if applicable):**

*Blend w/ Black Oil, sell as is in the trailer.*

7140 flash

1.4% water

API 23

vis 34 cSt

Blend Black Oil

Miles results

2891  
Grant Prideco Navasota



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/16/2008

Dear Melissa Burson

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2891

**Expiration Date** 7/16/2010

**Generator:** Grant Prideco Navasota

**Address:** FM 1227 Miller Industrial Park #1  
Navasota, TX 77868

### Waste Information

**Name of Waste:** used oil

**TCEQ Waste Code #:** Recycle

**Container Type:**

**Detailed Description of Process Generating Waste:**

various used machine and equipment oil

**Color:** black/brown

**Odor:** mild

**pH:** na

**Physical State:**

**Incompatibilities:** oxidizers

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

**CES Environmental  
Services, Inc.**

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
http://www.cesenvironmental.com  
TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

JW  
JRRUSH PLEASE  
P/U Monday!**SECTION 1: Material Producer Information**

Company: Grant Prideco  
Address: FM 1227 Miller Industrial Park #1  
City, State, Zip: Navasota Tx. 77868  
Contact: Ruben Arrendondo / Melissa Burnson Title: Environmental Tech / Purchasing  
Phone No: (936) 825-7070 Fax No: (936) 825-4328  
24/hr Phone: (936) 825-7070  
U.S. EPA I.D. No: TXD988041786  
State I.D.: 561191 SIC Code:

**SECTION 2: Billing Information - ☐ Same as Above**

Company: Grant Prideco  
Address: PO Box 1310  
City, State, Zip: Navasota TX 77868  
Contact: Ami Hammond Title: Accountin  
Phone No: (936) 825-7070 ext. 154276 Fax No: (936) 825-7318

**SECTION 3: General Description of the Material / Product**Name of Material / Product: Used OilDetailed Description of Process Generating or Producing the Material / Product: Various used machine and equipment oil

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: Black / BrownOdor: mildSpecific Gravity (water=1): < 1 Density: 876 lbs/gal 8Does this material contain any total phenolic compounds? ☐ Yes ☒ NoDoes this material contain any para substituted phenolic compounds? ☐ Yes ☒ NoLayers: ☒ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)  
Container Size: 5000

Frequency: ☐ Weekly ☒ Monthly ☐ Quarterly ☐ Yearly  
Number of Units (containers): 2 Other: Recycle

Proper U.S. DOT Shipping Name:

Class: na UN/NA: na PG: na RQ: na

Flash Point <del>&gt;140</del> → 200	pH N/A	N/A	N/A	Solids 0%
Oil & Grease n/amg/l	TOC n/amg/l	Zinc n/amg/l	Copper n/amg/l	Nickel n/amg/l

**SECTION 4: Physical and Chemical Data**

The material / product consists of the following materials	Ranges are acceptable	or %
Waste Oil	90-100	%
Water	0-10	%

**SECTION 5: Safety Related Data**

If the handling of this material / product requires the use of special protective equipment, please explain.

none

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.

Ces Eval.# 0608-11

**SECTION 7: Incompatibilities**

Please list all incompatibilities (if any):

none

oxidizers

**SECTION 8: Material Producer's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature:

*Ruben Arredondo*

Date: 7-16-08

Printed Name/Title:

Ruben Arredondo Environmental Tech

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: <i>Ruben Arredondo</i>	
Date: 7-16-08	Approved <input checked="" type="checkbox"/> Rejected <input type="checkbox"/>
Approval Number: 2891	

1. Base Pricing (including freight):

.15/gallon

2. Contamination Limit (maximum limit before surcharges apply):

3. Surcharge Pricing:

make sure it fits the profile

4. Special Testing Requirements:

~~separate oil & water~~; Test oil for ~~total~~ flash  
% oil, % Solids, chloro test on oil, TOC, Test water for  
pH, metals, phenols, % solids.

5. Treatment and Handling Protocol:

oil for ~~black oil~~ <sup>recovery</sup>; water to WWTP

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A

☒ Subcategory B

☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**7. Tests for Product Recovered/Recycled (if applicable):**

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**8. Management for Product Recovered/Recycled (if applicable)**

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=== COVER SHEET ===

TO:

\_\_\_\_\_

FROM:

GRANT PRIDECO PURCH

FAX#: 9368254328

TEL#: 936-825-9167

COMMENT:



4904 Griggs Road  
Houston, TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1676

To: Joe Wilson  
Cc: Keli Lofton, Gary Peterson

Date: 06/17/08

From: Miles Root

Lab Memo: 08-101

Subject: **Grant Prideco Evaluations 0608-11 and 12 - Updated**

A sample of oil and another sample of oily water from Grant Prideco, Navasota, have been evaluated for potential processing at CES. The sample of oil is used oil from a variety of equipment and is evaluation 0608-11. The oily water comes from both upset machinery and also has been used to cool down pipes. Both of these streams are acceptable for receipt and treatment/recycling at CES.

The oil sample looks to be a good base oil type material. The neat sample has a water of 0.18%; chlor-d-tect of less than 100 ppm; density of 0.876 (API gravity of 30) and a flash point greater than 140 deg F. This is good looking material and its cloudiness clears up nicely when heated to drive off the remaining water. Ash on this oil is 0.17 wt%.

The oily water contains approximately 2.6% oil. The sample will phase separate without much issue if given time. In our plant we would heat it to speed up its processing and remove all of the oil from the water more easily. The water treats easily but produces above average solids. A nice sized flock will form upon treating which will readily phase separate. The treated water has a TOC of 11,110 mg/L, no phenols and acceptable metals. Pricing should include costs for process heating of this material and also above average solids which will need to be disposed.

Volumes of these streams are approximately 3,500 gallons/month of the oil and one 5,000 gallon load of the oily water per week. Both are acceptable for processing at CES.

The table below summarizes the work done on these Grant Prideco evaluation streams.



**CES Environmental  
Services, Inc.**

4904 Griggs Road  
Houston, TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1676

Grant Prideco		
	Eval 0608-11	Eval 0608-12
pH		8
vol% oil		2.6
TOC, mg/L		11,110
Solids, vol%		0.5
Phenols, ppm		0
Metals		
Cd		0.094
Cr		0.186
Cu		0.148
Ni		0.44
Zn		0.079
Water, vol%	0.18	
Density	0.876	
API Gravity	30	
Ash, wt%	0.17	
Flash Point, deg F	>140	
Chlor-d-tect	<100	

2892  
Zach System Corp (La Porte)



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/16/2008

Dear Ronald Smith

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2892

**Expiration Date** 7/16/2010

**Generator:** ZaCh System Corp. (La Porte)

**Address:** 914 South 16th Street  
La Porte, TX 77571

### Waste Information

**Name of Waste:** NMP Step 5 First and Second Repulping

**TCEQ Waste Code #:** 01042071

**Container Type:**

**Detailed Description of Process Generating Waste:**

Pharmaceutical manufacturing process

**Color:** colorless to light brown **Odor:** slight

**pH:** 3-11

**Physical State:**

**Incompatibilities:** see MSDS

**Safety Related Data/Special Handling:**

std PPE for flammable materials

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

GRP

KIM



### CES Environmental Services, Inc.

4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TX0008950461 ISWR Number: 30900

#### SECTION 1: Generator Information

Company: ZaCH System Corp.  
Address: 914 South 16th Street  
City: LaPorte State: TX Zip: 77571  
Contact: Ron Smith Title: HS&E Manager  
Phone Number: 281-842-0201 Fax Number: \_\_\_\_\_  
24/hr Phone Number: 281-842-0201  
US EPA ID No: TXA000079062  
State ID No: \_\_\_\_\_ SIC Code: 88429

#### SECTION 2: Billing Information - ☒ Same as Above

Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Contact: \_\_\_\_\_ Title: \_\_\_\_\_  
Phone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_

#### SECTION 3: General Description of the Waste

Name of Waste: NMP Step 5 First and Second Repulping  
Detailed Description of Process Generating Waste: \_\_\_\_\_

Pharmaceutical manufacturing process

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: Colorless to light brown Odor: Slight Petroleum

Specific Gravity (water=1): 0.9 Density: 7.5 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2839	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tank ☒ Truck ☐ Other (explain)

Frequency: ☒ Weekly ☐ Monthly ☐ Yearly ☐ One-Time

Quantity: Campaign; 1-2 trucks per day

**Is this a USEPA "Hazardous Waste" per 40CFR 261.3?**

☐ Yes ☒ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it:

☐ 0001 (ignitable)

**☐ D002 (Corrosive)**

☐ D003 (Reactive)

**Characteristic for Toxic Metals:**

0004

☐ 0005

☐ 0006

0007

☐ 0008

□□□□□

**0010**

0011

**Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)**

Is this an "F" or "K" Listed waste or mixed with one?

☐ Yes ☒ No

**If "Yes", then please list ALL applicable codes:**

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No

☐ Yes ☒ No

If "Yes", then please list ALL applicable codes:

**Texas State Waste Code Numbers:**

01042071

**Proper US DOT Shipping Name:**

**RQ Flammable liquids, n.o.s. (methanol)**

**Class:** 3 UN/NA:

UN1993

**PG :**

**PGII**

RD:

5000

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>100		3-11		<25 mg/l		<25 mg/l		0-2 %	
Oil & Grease		TOC		Zinc		Copper		Nickel	
NA	mg/l	NA	mg/l	NA	mg/l	NA	mg/l	NA	mg/l

#### **SECTION 4: Physical and Chemical Data**

[illegible]

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE for flammable material

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.

MSDS

**SECTION 7: Incompatibilities**

Please list ALL Incompatibilities (if any):

See MSDS

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals:	X
TCLP Volatiles:	X
TCLP Semi-Volatiles:	X
Reactivity:	X
Corrosivity:	X
Ignitability:	X

**SECTION 9: Waste Recycle Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)**Is this material a wastewater or wastewater sludge?  
If 'Yes', complete this section.☒ YES ☒ NO

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oil Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Barge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☒ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

Chromium: 3.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

**SECTION 10: Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

**SECTION 11: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Ronald E. SmithDate: 7-15-08Printed Name/Title: RONALD E. Smith / EHS MANAGER**CES USE ONLY (DO NOT WRITE IN THIS SPACE)**Compliance Officer: Ronald E. SmithDate: 7-16-08Approval Number: 2892☒ Approved☐ Rejected

1. Base Pricing (including freight):

140/ gallon + \$ 500 freight + FSC

2. Contamination Limit (maximum limit before surcharges apply):

None

3. Surcharge Pricing:

None

4. Special Testing Requirements:

Check flash, pH, TOC  
~~Pressure tests~~

5. Treatment and Handling Protocol:

~~Process to System~~  
Terminate manifest + ~~process~~ send to  
System 1

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A

☐ Subcategory B

☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**7. Tests for Product Recovered/Recycled (if applicable):**

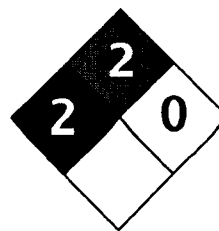
--

**8. Management for Product Recovered/Recycled (if applicable)**

--



**Science Lab.com**  
Chemicals & Laboratory Equipment



Health	1
Fire	2
Reactivity	0
Personal Protection	F

## Material Safety Data Sheet Dimethyl sulfoxide MSDS

### Section 1: Chemical Product and Company Identification

**Product Name:** Dimethyl sulfoxide

**Catalog Codes:** SLD3139, SLD1015

**CAS#:** 67-68-5

**RTECS:** PV6210000

**TSCA:** TSCA 8(b) inventory: Dimethyl sulfoxide

**CI#:** Not applicable.

**Synonym:** Methyl Sulfoxide; DMSO

**Chemical Name:** Dimethyl Sulfoxide

**Chemical Formula:** (CH<sub>3</sub>)<sub>2</sub>SO

#### Contact Information:

**Sciencelab.com, Inc.**

14025 Smith Rd.

Houston, Texas 77396

US Sales: **1-800-901-7247**

International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

**CHEMTREC (24HR Emergency Telephone), call:**

1-800-424-9300

**International CHEMTREC, call:** 1-703-527-3887

**For non-emergency assistance, call:** 1-281-441-4400

### Section 2: Composition and Information on Ingredients

#### Composition:

Name	CAS #	% by Weight
Dimethyl sulfoxide	67-68-5	100

**Toxicological Data on Ingredients:** Dimethyl sulfoxide: ORAL (LD50): Acute: 14500 mg/kg [Rat]. 7920 mg/kg [Mouse].  
DERMAL (LD50): Acute: 40000 mg/kg [Rat].

### Section 3: Hazards Identification

#### Potential Acute Health Effects:

Slightly hazardous in case of inhalation (lung irritant). Slightly hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion, .

#### Potential Chronic Health Effects:

Slightly hazardous in case of skin contact (irritant, sensitizer, permeator), of ingestion.

**CARCINOGENIC EFFECTS:** Not available.

**MUTAGENIC EFFECTS:** Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast.

**TERATOGENIC EFFECTS:** Not available.

**DEVELOPMENTAL TOXICITY:** Not available.

The substance may be toxic to blood, kidneys, liver, mucous membranes, skin, eyes.

Repeated or prolonged exposure to the substance can produce target organs damage.

#### Section 4: First Aid Measures

**Eye Contact:**

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Get medical attention if irritation occurs.

**Skin Contact:**

Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

**Serious Skin Contact:** Not available.

**Inhalation:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Serious Inhalation:** Not available.

**Ingestion:**

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

**Serious Ingestion:** Not available.

#### Section 5: Fire and Explosion Data

**Flammability of the Product:** Combustible.

**Auto-Ignition Temperature:** 215°C (419°F)

**Flash Points:** CLOSED CUP: 89°C (192.2°F). OPEN CUP: 95°C (203°F).

**Flammable Limits:** LOWER: 2.6% UPPER: 28.5% (Lewis), 42% (NFPA)

**Products of Combustion:** These products are carbon oxides (CO, CO<sub>2</sub>), sulfur oxides (SO<sub>2</sub>, SO<sub>3</sub>...).

**Fire Hazards in Presence of Various Substances:**

Flammable in presence of open flames and sparks, of heat.

Non-flammable in presence of shocks.

**Explosion Hazards in Presence of Various Substances:**

Risks of explosion of the product in presence of mechanical impact: Not available.

Risks of explosion of the product in presence of static discharge: Not available.

**Fire Fighting Media and Instructions:**

SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

**Special Remarks on Fire Hazards:**

When heated above its boiling point, dimethyl sulfoxide degrades giving off formaldehyde, methyl mercaptan, and sulfur dioxide

**Special Remarks on Explosion Hazards:** Not available.

#### Section 6: Accidental Release Measures

**Small Spill:**

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and

regional authority requirements.

**Large Spill:**

Combustible material.

Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. If the product is in its solid form: Use a shovel to put the material into a convenient waste disposal container. If the product is in its liquid form: Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

## Section 7: Handling and Storage

**Precautions:**

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents.

**Storage:**

Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Hygroscopic. Sensitive to light. Store in light-resistant containers.

## Section 8: Exposure Controls/Personal Protection

**Engineering Controls:**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

**Personal Protection:**

Safety glasses. Synthetic apron. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves (impervious).

**Personal Protection in Case of a Large Spill:**

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:** Not available.

## Section 9: Physical and Chemical Properties

**Physical state and appearance:** Liquid.

**Odor:** Sulfurous. (Slight.)

**Taste:** Bitter with sweet after-taste (Slight.)

**Molecular Weight:** 78.13 g/mole

**Color:** Clear Colorless.

**pH (1% soln/water):** Not available.

**Boiling Point:** 189°C (372.2°F)

**Melting Point:** 18.45°C (65.2°F)

**Critical Temperature:** Not available.

**Specific Gravity:** 1.1008 (Water = 1)

**Vapor Pressure:** 0.1 kPa (@ 20°C)

**Vapor Density:** 2.71 (Air = 1)

**Volatility:** Not available.

**Odor Threshold:** Not available.

**Water/Oil Dist. Coeff.:** The product is more soluble in water; log(oil/water) = -2

**Ionicity (in Water):** Not available.

**Dispersion Properties:** See solubility in water, diethyl ether, acetone.

**Solubility:**

Soluble in cold water, hot water, diethyl ether, acetone.

Soluble in chloroform, ethanol, and benzene.

### Section 10: Stability and Reactivity Data

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions of Instability:** Heat, ignition sources, flames, incompatibles

**Incompatibility with various substances:** Reactive with oxidizing agents, reducing agents, acids, alkalis.

**Corrosivity:** Non-corrosive in presence of glass.

**Special Remarks on Reactivity:**

Hygroscopic. It has a strong water affinity, and if left exposed it will become rapidly diluted.

Incompatible with strong oxidants, arylhalides, bromobenzoyl acetanilide, magnesium perchlorate, perchloric acid, and sodium hydroxide, alkali metals, hydrobromic acid, acidic solutions of alkali bromides, organic and inorganic acid chlorides, acid halides, cyanuric chloride, silver fluoride, methyl bromide, sodium hydride, periodic acid, diborane, iodine pentafluoride, silicon tetrachloride, phosphorous halides (phosphorous trichloride), trichloroacetic acid + copper wool, phosphorous trioxide, thionyl chloride, plastics

**Special Remarks on Corrosivity:** Not available.

**Polymerization:** Will not occur.

### Section 11: Toxicological Information

**Routes of Entry:** Absorbed through skin. Eye contact. Inhalation.

**Toxicity to Animals:**

Acute oral toxicity (LD50): 7920 mg/kg [Mouse].

Acute dermal toxicity (LD50): 40000 mg/kg [Rat].

**Chronic Effects on Humans:**

MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast.

May cause damage to the following organs: blood, kidneys, liver, mucous membranes, skin, eyes.

**Other Toxic Effects on Humans:**

Slightly hazardous in case of inhalation (lung irritant).

Slightly hazardous in case of skin contact (irritant, permeator), of ingestion, .

**Special Remarks on Toxicity to Animals:** Not available.

**Special Remarks on Chronic Effects on Humans:**

May cause adverse reproductive effects (female fertility and fetotoxicity - post implantation mortality) and birth defects based on animal data.

May cause cancer (tumorigenic) based on animal data.

May affect genetic material (mutagenic).

**Special Remarks on other Toxic Effects on Humans:**

**Acute Potential Health Effects:**

**Skin:** Causes skin irritation. May cause urticaria(hives), skin rashes, and dermatitis. Dimethyl Sulfoxide is readily absorbed through skin and may carry other dissolved chemicals into the body. An unusual garlic-onion-oyster odor may develop on breath and body/skin. Absorption through skin may also cause diarrhea, and affect respiration(dyspnea, cyanosis), blood, behavior (fatigue, dizziness, sedation, headaches), vision (transient photophobia, and disturbances of color vision), urinary system (hematuria).

**Eyes:** Causes eye irritation. May cause blurred vision, corneal opacity, chemical conjunctivitis.

**Inhalation:** Causes respiratory tract irritation. Symptoms from exposure to high vapor concentrations may include coughing, shortness of breath, headache, dizziness and sedation.

**Ingestion:** Causes gastrointestinal tract irritation, and an usual garlic-onion-oyster may develop on breath, and body/skin. May affect behavior/central nervous system, respiration (dyspnea). Symptoms may include nausea, vomiting, and diarrhea, abdominal pain, drowsiness, confusion, lethargy, agitation, disorientation, tremor, muscle weakness, chills, chest pains. May also affect liver (elevated liver enzymes, jaundice), cardiovascular system, and urinary system (hematuria, hemoglobinuria, renal tubular injury), eyes (transient photophobia and disturbances of color vision, conjunctive irritation)

**Chronic Potential Health Effects:**

**Skin:** Chronic absorption may cause effects similar to that of acute skin absorption. Chronic skin contact may cause scaling dermatitis.

**Ingestion:** Repeated oral doses may affect the kidneys (hematuria), blood (normocytic anemia, changes in red blood cell count), and metabolism (weight loss/anorexia), liver (jaundice).

## Section 12: Ecological Information

**Ecotoxicity:** Not available.

**BOD5 and COD:** Not available.

**Products of Biodegradation:**

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation:** The product itself and its products of degradation are not toxic.

**Special Remarks on the Products of Biodegradation:** Not available.

## Section 13: Disposal Considerations

**Waste Disposal:**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

## Section 14: Transport Information

**DOT Classification:** Not a DOT controlled material (United States).

**Identification:** Not applicable.

**Special Provisions for Transport:** Not applicable.

## Section 15: Other Regulatory Information

**Federal and State Regulations:** TSCA 8(b) inventory: Dimethyl sulfoxide

**Other Regulations:**

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

National Inventory Lists of China, Japan, Korea, and Philippines.

**Other Classifications:**

**WHMIS (Canada):**

CLASS B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).

**DSCL (EEC):**

R36/37/38- Irritating to eyes, respiratory system and skin.

S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.

**HMIS (U.S.A.):**

Health Hazard: 1

Fire Hazard: 2

Reactivity: 0

Personal Protection: F

**National Fire Protection Association (U.S.A.):**

Health: 2

Flammability: 2

Reactivity: 0

Specific hazard:

**Protective Equipment:**

Gloves (impervious).

Synthetic apron.

Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

Safety glasses.

## Section 16: Other Information

**References:** Not available.

**Other Special Considerations:** Not available.

**Created:** 10/10/2005 08:37 PM

**Last Updated:** 10/10/2005 08:37 PM

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# Material Data Safety Sheet (MSDS): METHYL ALCOHOL

1. Product Identification	7. Handling and Storage
2. Composition	8. Exposure Controls/Personal Protection
3. Hazards Identification	9. Physical and Chemical Properties
4. First Aid Measures	10. Stability and Reactivity
5. Fire Fighting Measures	11. Toxicological Information
6. Accidental Release Measures	12. Ecological Information
	13. Disposal Considerations
	16. Other Information

Note: This information sheet has been re-formatted for better clarity by the Department of Earth Sciences.

Some of the data such as information on shipping and weapons treaties were intentionally left out. If you want to look at the complete MSDS, you can either check one of the hardcopy versions in the Department,

contact the manufacturer, or check one of the various Web-based databases such as those compiled by BU's Office of Environmental Health & Safety ([www.bu.edu/ehs/msds/index.htm](http://www.bu.edu/ehs/msds/index.htm)).

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## 1. Product Identification

MSDS Name: **Methyl alcohol**, reagent acs, 99.8% (gc)

**Synonyms: Carbinol, methanol, methyl hydroxide, monohydroxymethane, pyroxylic spirit, wood alcohol, wood naptha, wood spirit.**

Company Identification: Acros Organics N.V.

One Reagent Lane

Fairlawn, NJ 07410

For information in North America, call: 800-ACROS-01

For emergencies in the US, call CHEMTREC: 800-424-9300

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## 2. Composition/Information on Ingredients

CAS#	Chemical Name	%	EINECS#
------	---------------	---	---------

67-56-1	Methyl Alcohol	99+%	200-659-6
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Hazard Symbols: T F  
Risk Phrases: 11 23/25

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### 3. Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: APHA: 10 max. Flash Point: 12 deg C.

**Warning! Flammable liquid.** May cause skin irritation. May cause central nervous system depression. May be absorbed through the skin. May cause kidney damage. May cause respiratory and digestive tract irritation. May be fatal or cause blindness if swallowed. May cause fetal effects. Causes severe eye irritation and possible injury. Target Organs: Kidneys, central nervous system, eyes.

#### Potential Health Effects

##### Eye:

Produces irritation, characterized by a burning sensation, redness, tearing, inflammation, and possible corneal injury. Vapors may cause eye irritation. May cause painful sensitization to light.

##### Skin:

May cause skin irritation.

##### Ingestion:

May be fatal or cause blindness if swallowed. May cause irritation of the digestive tract. May cause kidney damage. May cause systemic toxicity with acidosis. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure.

##### Inhalation:

May cause respiratory tract irritation. May cause visual impairment and possible permanent blindness. May cause effects similar to those described for ingestion.

##### Chronic:

Prolonged or repeated skin contact may cause dermatitis. Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion.

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#### 4. First Aid Measures

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Get medical aid immediately.

Skin:

Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately. Induce vomiting by giving one teaspoon of Syrup of Ipecac.

Inhalation:

Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Effects may be delayed. Ethanol may inhibit metabolism.

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#### 5. Fire Fighting Measures

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Use water spray to keep fire-exposed containers cool. Flammable Liquid. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. May be ignited by heat, sparks, and flame. Containers may explode when heated.

Extinguishing Media:

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray. Cool containers with flooding quantities of water until well after fire is out.

Autoignition Temperature: 455 deg C ( 851.00 deg F)

Flash Point: 12 deg C ( 53.60 deg F)

NFPA Rating: health-1; flammability-3; reactivity-0

Explosion Limits, Lower: 6.00 vol %

Upper: 31.00 vol %

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## 6. Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material, (e.g., dry sand or earth), then place into a chemical waste container. Remove all sources of ignition. Provide ventilation. A vapor suppressing foam may be used to reduce vapors. Water spray may reduce vapor but may not prevent ignition in closed spaces.

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## 7. Handling and Storage

Handling:

Wash thoroughly after handling. Use only in a well ventilated area. Ground and bond containers when transferring material. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Avoid contact with heat, sparks and flame. Avoid ingestion and inhalation. Do not ingest or inhale. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage:

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

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## 8. Exposure Controls/Personal Protection

Engineering Controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits:

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
	200 ppm; 262 mg/m3; 250 ppm	200 ppm TWA;	200 ppm

Methyl Alcohol	STEL; 328 mg/m3 STEL; skin - potential for cutaneous absorption	260 mg/m3 TWA; 6000 ppm IDLH	TWA; 260 mg/m3 TWA
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OSHA Vacated PELs:

Methyl Alcohol:

200 ppm TWA; 260 mg/m3 TWA

### Personal Protective Equipment

#### Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

#### Skin:

Wear appropriate protective gloves to prevent skin exposure.

#### Clothing:

Wear appropriate protective clothing to prevent skin exposure.

#### Respirators:

Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149.

Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

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## 9. Physical and Chemical Properties (Methanol, Methyl Alcohol)

Appearance:	Colorless liquid
Odor:	Slight alcohol-like
Solubility:	miscible
Density:	0.7910 g/cm3
pH:	Not available
% Volatiles by volume @ 21C (70F):	Not available
Boiling Point:	64.7 deg C @ 760.00mm Hg
Melting Point:	-98 deg C
Vapor Density (Air=1):	1.1
Vapor Pressure (mm Hg):	128 mm Hg @20 deg C
Evaporation Rate (Ether=1):	5.2
Viscosity:	0.55 cP 20.00

Molecular Formula: CH4O

Molecular Weight: 32.04

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MSDS Index**10. Stability and Reactivity**Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

High temperatures, incompatible materials, ignition sources.

Incompatibilities with Other Materials:

Acids (mineral, non-oxidizing, e.g. hydrochloric acid, hydrofluoric acid, muriatic acid, phosphoric acid), acids (mineral, oxidizing, e.g. chromic acid, hypochlorous acid, nitric acid, sulfuric acid), acids (organic, e.g. acetic acid, benzoic acid, formic acid, methanoic acid, oxalic acid), azo, diazo, and hydrazines (e.g. dimethyl hydrazine, hydrazine, methyl hydrazine), isocyanates (e.g. methyl isocyanate), metals (alkali and alkaline, e.g. cesium, potassium, sodium), nitrides (e.g. potassium nitride, sodium nitride), peroxides and hydroperoxides (organic, e.g. acetyl peroxide, benzoyl peroxide, butyl peroxide, methyl ethyl ketone peroxide), epoxides (e.g. butyl glycidyl ether), oxidizing agents (strong, e.g. bromine, hydrogen peroxide, nitrogen dioxide, potassium nitrate), reducing agents (strong, e.g. aluminum carbide, chlorosilane, hydrogen phosphide, lithium hydride), water reactive substances (e.g. acetic anhydride, alkyl aluminum chloride, calcium carbide, ethyl dichlorosilane).

Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide, formaldehyde.

Hazardous Polymerization: Has not been reported

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**11. Toxicological Information**

RTECS#:

CAS# 67-56-1: PC1400000

LD50/LC50:

CAS# 67-56-1: Inhalation, rat: LC50 = 64000 ppm/4H; Oral, mouse: LD50 = 7300 mg/kg; Oral, rabbit: LD50 = 14200 mg/kg; Oral, rat: LD50 = 5628 mg/kg; Skin, rabbit: LD50 = 15800 mg/kg.

Carcinogenicity:

Methyl Alcohol -

Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology:

Methanol has been shown to produce fetotoxicity in the embryo or fetus of laboratory animals. Specific developmental abnormalities include cardiovascular, musculoskeletal, and urogenital systems.

Teratogenicity:

No data available.

Reproductive Effects:

No data available.

Neurotoxicity:

No data available.

Mutagenicity:

No data available.

Other Studies:

None.

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## 12. Ecological Information

Ecotoxicity:

Goldfish (fresh water), 250 ppm/11H, death. Aquatic toxicity rating: TLm 96 >1000 ppm. LC50(48hr) trout 8000 mg/l LC50(24hr) brine shrimp 10000 mg/l EC50(30min) Photobacterium phosphoreum 51000-320000ppm, microtox test (Kaiser, K.L.E. et al. Water Pollut. Res. J. Can. 1991, 26(3), 361-431) Bioaccumulation. Bioconcentration factor for goldenide<10 (Freitag, D. et al. Chemosphere 1985, 14, 1589-1616).

Environmental Fate:

Nitrification inhibition. IC50ammonic oxidation by Nitrosomonas 160 mg/l (exposure not specified) (Hooper, A. J. Bacteriol. 1973, 115, 480). Metabolised by the marine ammonia oxidising bacterium Nitrococcus oceanus with the liberation of CO2 (Ward, B.B. Arch. Microbiol. 1987, 147(2), 126-133). Degradation studies. Under anaerobic conditions traces of carbon monoxide were formed together with methane by activated sludge inoculum (Hickey, R.F. et al. Biotechnol. Lett. 1987, 9(1), 63-66)

Physical/Chemical:

No information available.

Other:

None.

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## 13. Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

RCRA D-Series Maximum Concentration of Contaminants: None listed.

RCRA D-Series Chronic Toxicity Reference Levels: None listed.

RCRA F-Series: None listed.

RCRA P-Series: None listed.

RCRA U-Series: CAS# 67-56-1: waste number U154 (Ignitable waste).

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**16. Other Information**


MSDS Creation Date: 7/03/1995 Revision #4 Date: 4/14/1998

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MSDS Number: S4034 \*\*\*\*\* Effective Date: 05/04/07 \*\*\*\*\* Supersedes: 07/07/04

<b>MSDS</b>	<b>Material Safety Data Sheet</b>	24 Hour Emergency Telephone: 800-858-2151 CHEMTEC: 1-800-424-9300
		National Response in Canada CANUTEC: 613-598-6565
From: Mallinckrodt Baker, Inc. 222 Red School Lane Phillipsburg, NJ 08865	 <b>Mallinckrodt CHEMICALS</b>	Outside U.S. and Canada Chemtec: 763-527-3887
		NOTE: CHEMTEC, CANUTEC and National Response Center emergency numbers are the responsibility of the user of chemical products involving a spill, leak, fire, explosion or accident involving chemicals.
All non-emergency questions should be directed to Customer Service (1-800-562-2637) for assistance.		

## SODIUM HYDROXIDE

### 1. Product Identification

**Synonyms:** Caustic soda; lye; sodium hydroxide solid; sodium hydrate  
**CAS No.:** 1310-73-2  
**Molecular Weight:** 40.00  
**Chemical Formula:** NaOH  
**Product Codes:**  
 J.T. Baker: 1508, 3717, 3718, 3721, 3722, 3723, 3728, 3734, 3736, 5045, 5565  
 Mallinckrodt: 7001, 7680, 7708, 7712, 7772, 7798

### 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Sodium Hydroxide	1310-73-2	99 - 100%	Yes

### 3. Hazards Identification

#### Emergency Overview

**POISON! DANGER! CORROSIVE. MAY BE FATAL IF SWALLOWED. HARMFUL IF INHALED. CAUSES BURNS TO ANY AREA OF CONTACT. REACTS WITH WATER, ACIDS AND OTHER MATERIALS.**

**SAF-T-DATA<sup>(tm)</sup>** Ratings (Provided here for your convenience)

Health Rating: 4 - Extreme (Poison)  
 Flammability Rating: 0 - None  
 Reactivity Rating: 2 - Moderate  
 Contact Rating: 4 - Extreme (Corrosive)  
 Lab Protective Equip: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES  
 Storage Color Code: White Stripe (Store Separately)

#### Potential Health Effects

##### Inhalation:

Severe irritant. Effects from inhalation of dust or mist vary from mild irritation to serious damage of the upper respiratory tract, depending on severity of exposure. Symptoms may include sneezing, sore throat or runny nose. Severe pneumonitis may occur.

##### Ingestion:

Corrosive! Swallowing may cause severe burns of mouth, throat, and stomach. Severe scarring of tissue and death may result. Symptoms may include bleeding, vomiting, diarrhea, fall in blood pressure. Damage may appear days after exposure.

##### Skin Contact:

Corrosive! Contact with skin can cause irritation or severe burns and scarring with greater exposures.

##### Eye Contact:

Corrosive! Causes irritation of eyes, and with greater exposures it can cause burns that may result in permanent impairment of vision, even blindness.

##### Chronic Exposure:

Prolonged contact with dilute solutions or dust has a destructive effect upon tissue.

##### Aggravation of Pre-existing Conditions:

Persons with pre-existing skin disorders or eye problems or impaired respiratory function may be more susceptible to the effects of the substance.

## 4. First Aid Measures

**Inhalation:**

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

**Ingestion:**

DO NOT INDUCE VOMITING! Give large quantities of water or milk if available. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Skin Contact:**

Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician, immediately. Wash clothing before reuse.

**Eye Contact:**

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

**Note to Physician:**

Perform endoscopy in all cases of suspected sodium hydroxide ingestion. In cases of severe esophageal corrosion, the use of therapeutic doses of steroids should be considered. General supportive measures with continual monitoring of gas exchange, acid-base balance, electrolytes, and fluid intake are also required.

## 5. Fire Fighting Measures

**Fire:**

Not considered to be a fire hazard. Hot or molten material can react violently with water.

Can react with certain metals, such as aluminum, to generate flammable hydrogen gas.

**Explosion:**

Not considered to be an explosion hazard.

**Fire Extinguishing Media:**

Use any means suitable for extinguishing surrounding fire. Adding water to caustic solution generates large amounts of heat.

**Special Information:**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

## 6. Accidental Release Measures

Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust. Do not flush caustic residues to the sewer. Residues from spills can be diluted with water, neutralized with dilute acid such as acetic, hydrochloric or sulfuric. Absorb neutralized caustic residue on clay, vermiculite or other inert substance and package in a suitable container for disposal.

US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

## 7. Handling and Storage

Keep in a tightly closed container. Protect from physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities. Always add the caustic to water while stirring; never the reverse. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product. Do not store with aluminum or magnesium. Do not mix with acids or organic materials.

## 8. Exposure Controls/Personal Protection

**Airborne Exposure Limits:**

- OSHA Permissible Exposure Limit (PEL):

2 mg/m<sup>3</sup> Ceiling

- ACGIH Threshold Limit Value (TLV):

2 mg/m<sup>3</sup> Ceiling

**Ventilation System:**

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

**Personal Respirators (NIOSH Approved):**

If the exposure limit is exceeded and engineering controls are not feasible, a half facepiece particulate respirator (NIOSH type N95 or better filters) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece particulate respirator (NIOSH type N100 filters) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

**Skin Protection:**

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Eye Protection:**

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

## 9. Physical and Chemical Properties

**Appearance:**

White, deliquescent pellets or flakes.

**Odor:**

Odorless.

**Solubility:**

111 g/100 g of water.

**Specific Gravity:**

2.13

**pH:**

13 - 14 (0.5% soln.)

**% Volatiles by volume @ 21C (70F):**

0

**Boiling Point:**

1390C (2534F)

**Melting Point:**

318C (604F)

**Vapor Density (Air=1):**

> 1.0

**Vapor Pressure (mm Hg):**

Negligible.

**Evaporation Rate (BuAc=1):**

No information found.

## 10. Stability and Reactivity

**Stability:**

Stable under ordinary conditions of use and storage. Very hygroscopic. Can slowly pick up moisture from air and react with carbon dioxide from air to form sodium carbonate.

**Hazardous Decomposition Products:**

Sodium oxide. Decomposition by reaction with certain metals releases flammable and explosive hydrogen gas.

**Hazardous Polymerization:**

Will not occur.

**Incompatibilities:**

Sodium hydroxide in contact with acids and organic halogen compounds, especially trichloroethylene, may causes violent reactions. Contact with nitromethane and other similar nitro compounds causes formation of shock-sensitive salts. Contact with metals such as aluminum, magnesium, tin, and zinc cause formation of flammable hydrogen gas. Sodium hydroxide, even in fairly dilute solution, reacts readily with various sugars to produce carbon monoxide. Precautions should be taken including monitoring the tank atmosphere for carbon monoxide to ensure safety of personnel before vessel entry.

**Conditions to Avoid:**

Moisture, dusting and incompatibles.

## 11. Toxicological Information

Irritation data: skin, rabbit: 500 mg/24H severe; eye rabbit: 50 ug/24H severe; investigated as a mutagen.

-----\Cancer Lists\-----			
Ingredient	---NTF Carcinogen---		IARC Category
	Known	Anticipated	
Sodium Hydroxide (1310-73-2)	No	No	None

## 12. Ecological Information

**Environmental Fate:**

No information found.

**Environmental Toxicity:**

No information found.

## 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

## 14. Transport Information

**Domestic (Land, D.O.T.)**

**Proper Shipping Name:** SODIUM HYDROXIDE, SOLID

**Hazard Class:** 8

**UN/NA:** UN1823

**Packing Group:** II

**Information reported for product/size:** 300LB

**International (Water, I.M.O.)****Proper Shipping Name:** SODIUM HYDROXIDE, SOLID**Hazard Class:** 8**UN/NA:** UN1823**Packing Group:** II**Information reported for product/size:** 300LB**15. Regulatory Information**

```

-----\Chemical Inventory Status - Part 1\-----
Ingredient                                     TSCA  EC   Japan  Australia
-----
Sodium Hydroxide (1310-73-2)                 Yes  Yes  Yes    Yes

```

```

-----\Chemical Inventory Status - Part 2\-----
Ingredient                                     Korea  DSL   NDSL   Phil.
-----
Sodium Hydroxide (1310-73-2)                 Yes   Yes   No     Yes

```

```

-----\Federal, State & International Regulations - Part 1\-----
Ingredient                                     -SARA 302-  -SARA 313-
RQ  TPQ  List  Chemical Catg.
-----
Sodium Hydroxide (1310-73-2)                 No    No    No     No

```

```

-----\Federal, State & International Regulations - Part 2\-----
Ingredient                                     CERCLA  RCRA  TSCA
261.33  8(d)
-----
Sodium Hydroxide (1310-73-2)                 1000   No    No

```

Chemical Weapons Convention: No    TSCA 12(b): No    CDTA: No  
 SARA 311/312: Acute: Yes    Chronic: No    Fire: No    Pressure: No  
 Reactivity: Yes    (Pure / Solid)

**Australian Hazchem Code:** 2R**Poison Schedule:** S6**WHMIS:**

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

**16. Other Information****NFPA Ratings:** Health: 3 Flammability: 0 Reactivity: 1**Label Hazard Warning:**

POISON! DANGER! CORROSIVE. MAY BE FATAL IF SWALLOWED. HARMFUL IF INHALED. CAUSES BURNS TO ANY AREA OF CONTACT. REACTS WITH WATER, ACIDS AND OTHER MATERIALS.

**Label Precautions:**

Do not get in eyes, on skin, or on clothing.

Do not breathe dust.

Keep container closed.

Use only with adequate ventilation.

Wash thoroughly after handling.

**Label First Aid:**

If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. In all cases get medical attention immediately.

**Product Use:**

Laboratory Reagent.

**Revision Information:**

No Changes.

**Disclaimer:**

\*\*\*\*\*  
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 \*\*\*\*\*

Prepared by: Environmental Health &amp; Safety

Phone Number: (314) 654-1600 (U.S.A.)

# Safety data for magnesium iodide



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Glossary of terms on this data sheet.

The information on this web page is provided to help you to work safely, but it is intended to be an overview of hazards, not a replacement for a full Material Safety Data Sheet (MSDS). MSDS forms can be downloaded from the web sites of many chemical suppliers.

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## General

Synonyms: iodic acid magnesium salt, magnesium diiodide

Use:

Molecular formula:  $\text{MgI}_2$

CAS No: 10377-58-9

EINECS No: 233-825-1

## Physical data

Appearance: white powder

Melting point: 637 C

Boiling point:

Vapour density:

Vapour pressure:

Density ( $\text{g cm}^{-3}$ ): 4.43

Flash point:

Explosion limits:

Autoignition temperature:

Water solubility: 1480 g/l at 18 C

## Stability

Stable, but moisture and air sensitive - store under inert gas.

## Toxicology

May act as an irritant. May cause harm to the unborn child.

**Toxicity data**

(The meaning of any toxicological abbreviations which appear in this section is given [here](#).)

**Risk phrases**

(The meaning of any risk phrases which appear in this section is given [here](#).)  
R36 R38 R42 R43 R61.

**Transport information**

(The meaning of any UN hazard codes which appear in this section is given [here](#).)

Non-hazardous for air, sea and road freight.

**Personal protection**

Safety glasses, adequate ventilation.

**Safety phrases**

(The meaning of any safety phrases which appear in this section is given [here](#).)

S22 S36 S37 S39 S45 53.

[Return to [Physical & Theoretical Chemistry Lab. Safety home page](#).]

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MSDS Number: **M0156** \*\*\*\*\* Effective Date: **08/02/07** \*\*\*\*\* Supersedes: **11/04/04**

<b>MSDS</b> Material Safety Data Sheet		24 Hour Emergency Telephone: 508-459-2151 CHEMTEC: 1-800-424-8300
		National Response in Canada CANUTEC: 613-696-6666
From: Mallinckrodt Baker, Inc. 222 Red School Lane Phillipsburg, NJ 08865		Outside U.S. and Canada Chemtec: 703-527-3887
J.T. Baker CHEMICALS		NOTE: CHEMTEC, CANUTEC and National Response Center emergency numbers are available only in the event of chemical emergencies involving a spill, leak, fire, explosion or incident that may be harmful.
All non-emergency questions should be directed to Customer Service (1-800-562-2537) for assistance.		

## MAGNESIUM CHLORIDE

### 1. Product Identification

**Synonyms:** Magnesium chloride, hexahydrate; Magnesium chloride, 6-hydrate, crystal  
**CAS No.:** 7786-30-3 (Anhydrous); 7791-18-6 (Hexahydrate)  
**Molecular Weight:** 203.30  
**Chemical Formula:** MgCl<sub>2</sub> 6H<sub>2</sub>O  
**Product Codes:**  
 J.T. Baker: 2444, 2448, 2449, 2450, 4003  
 Mallinckrodt: 12131, 5910, 5933, 5954, 5956, 5958, 5960, 7550, 7791

### 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Magnesium Chloride	7786-30-3	98 - 100%	Yes

### 3. Hazards Identification

#### Emergency Overview

**CAUTION! MAY BE HARMFUL IF SWALLOWED.**

**SAF-T-DATA<sup>(tm)</sup>** Ratings (Provided here for your convenience)

Health Rating: 1 - Slight  
 Flammability Rating: 0 - None  
 Reactivity Rating: 1 - Slight  
 Contact Rating: 1 - Slight  
 Lab Protective Equip: GOGGLES; LAB COAT; PROPER GLOVES  
 Storage Color Code: Green (General Storage)

#### Potential Health Effects

##### Inhalation:

Inhalation of dust may cause mild irritation to the mucous membranes.

##### Ingestion:

Since magnesium salts are slowly absorbed, abdominal pain, vomiting and diarrhea may be the only symptoms. However, if elimination is blocked by bowel blockage or other reasons, CNS depression, lack of reflexes, hypocalcemia (deficiency of calcium in the blood) may occur.

##### Skin Contact:

No adverse effects expected but may cause minor skin irritation.

##### Eye Contact:

No adverse effects expected but dust may cause mechanical irritation.

##### Chronic Exposure:

No information found.

##### Aggravation of Pre-existing Conditions:

No information found.

### 4. First Aid Measures

**Inhalation:**

Remove to fresh air. Get medical attention for any breathing difficulty.

**Ingestion:**

Give several glasses of water to drink to dilute. If large amounts were swallowed, get medical advice.

**Skin Contact:**

Remove any contaminated clothing. Wash skin with soap and water for at least 15 minutes. Get medical attention if irritation develops or persists.

**Eye Contact:**

Wash thoroughly with running water. Get medical advice if irritation develops.

**Note to Physician:**

IV administration of calcium gluconate will partially reverse the effects of acute magnesium toxicity. Ventricular support with calcium chloride infusion and mannitol forced diuresis has also been successful.

## 5. Fire Fighting Measures

**Fire:**

Not considered to be a fire hazard.

**Explosion:**

Not considered to be an explosion hazard. At room temperature the addition of magnesium chloride to furan-2-peroxycarboxylic acid, will cause the acid to explode.

**Fire Extinguishing Media:**

Use any means suitable for extinguishing surrounding fire.

**Special Information:**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

## 6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

## 7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

## 8. Exposure Controls/Personal Protection

**Airborne Exposure Limits:**

None established.

**Ventilation System:**

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

**Personal Respirators (NIOSH Approved):**

For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

**Skin Protection:**

Wear protective gloves and clean body-covering clothing.

**Eye Protection:**

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

## 9. Physical and Chemical Properties

**Appearance:**

Colorless flakes or crystals.

**Odor:**

Odorless.

**Solubility:**

167g/100ml water @ 20C (68F)

**Density:**

1.57

**pH:**

5% in water is neutral to litmus.

**% Volatiles by volume @ 21C (70F):**

0

**Boiling Point:**

Not applicable.

**Melting Point:**

118C (244F)

**Vapor Density (Air=1):**

No information found.

**Vapor Pressure (mm Hg):**

No information found.

**Evaporation Rate (BuAc=1):**

No information found.

## 10. Stability and Reactivity

**Stability:**

Stable under ordinary conditions of use and storage. By strong ignition is converted into oxychloride.

**Hazardous Decomposition Products:**

When heated to decomposition it emits corrosive hydrochloric acid vapor. When heated to temperatures above 300C (572F) it emits toxic fumes of chlorine gas.

**Hazardous Polymerization:**

Will not occur.

**Incompatibilities:**

Furan-2-peroxyacetic acid. Strong oxidizing agents will release chlorine.

**Conditions to Avoid:**

Heat, moisture, incompatibles.

## 11. Toxicological Information

Oral rat LD50: 8100mg/kg. Investigated as a mutagen.

-----\Cancer Lists\-----			
Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Magnesium Chloride (7786-30-3)	No	No	None

## 12. Ecological Information

**Environmental Fate:**

No information found.

**Environmental Toxicity:**

No information found.

## 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

## 14. Transport Information

Not regulated.

## 15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----				
Ingredient	TSCA	EC	Japan	Australia
Magnesium Chloride (7786-30-3)	Yes	Yes	Yes	Yes

-----\Chemical Inventory Status - Part 2\-----				
Ingredient	--Canada--			
	Korea	DSL	NDSL	Phil.
Magnesium Chloride (7786-30-3)	Yes	Yes	No	Yes

-----\Federal, State & International Regulations - Part 1\-----				
Ingredient	-SARA 302-		-SARA 313-	
	RQ	TPQ	List	Chemical Catg.
Magnesium Chloride (7786-30-3)	No	No	No	No

-----\Federal, State & International Regulations - Part 2\-----			
Ingredient	-RCRA-		-TSCA-
	CERCLA	2e1.33	8 (d)
Magnesium Chloride (7786-30-3)	No	No	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No  
SARA 311/312: Acute: Yes Chronic: No Fire: No Pressure: No  
Reactivity: No (Pure / Solid)

**Australian Hazchem Code:** None allocated.

**Poison Schedule:** None allocated.

**WHMIS:**

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

## 16. Other Information

**NFPA Ratings:** Health: 1 Flammability: 0 Reactivity: 0

**Label Hazard Warning:**

CAUTION! MAY BE HARMFUL IF SWALLOWED.

**Label Precautions:**

Keep container closed.

Wash thoroughly after handling.

**Label First Aid:**

If swallowed, give large amounts of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.

**Product Use:**

Laboratory Reagent.

**Revision Information:**

No Changes.

**Disclaimer:**

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Prepared by: Environmental Health & Safety  
Phone Number: (314) 654-1600 (U.S.A.)

MSDS Number: H3880 \*\*\*\*\* Effective Date: 01/19/06 \*\*\*\*\* Supersedes: 09/24/04

<b>MSDS</b> Material Safety Data Sheet		24 Hour Emergency Telephone: 508-858-2151 CHEMTREC: 1-800-424-9300
From: Mallinckrodt Baker, Inc. 222 Red School Lane Phillipsburg, NJ 08865		National Response in Canada CANUTEC: 813-596-6568
Mallinckrodt CHEMICALS J.T. Baker		Outside U.S. and Canada Chemtec: 703-527-3897
NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers in the U.S. only. In the event of chemical emergencies involving a spill, leak, fire, exposure or incident of hazardous chemicals.		
All non-emergency questions should be directed to Customer Service at 800-562-2537, for assistance.		

**HYDROCHLORIC ACID, 33 - 40%****1. Product Identification****Synonyms:** Muriatic acid; hydrogen chloride, aqueous**CAS No.:** 7647-01-0**Molecular Weight:** 36.46**Chemical Formula:** HCl**Product Codes:**

J.T. Baker: 5367, 5537, 5575, 5800, 5814, 5821, 5839, 5861, 5862, 5894, 5962, 5972, 5994, 6900, 7831, 9529, 9530, 9534, 9535, 9536, 9538, 9539, 9540, 9544, 9548

Mallinckrodt: 2062, 2515, 2612, 2624, 2626, 3861, 5583, 5587, H611, H613, H987, H992, H999, V078, V628

**2. Composition/Information on Ingredients**

Ingredient	CAS No	Percent	Hazardous
Hydrogen Chloride	7647-01-0	33 - 40%	Yes
Water	7732-18-5	60 - 67%	No

**3. Hazards Identification****Emergency Overview****POISON! DANGER! CORROSIVE. LIQUID AND MIST CAUSE SEVERE BURNS TO ALL BODY TISSUE. MAY BE FATAL IF SWALLOWED OR INHALED. INHALATION MAY CAUSE LUNG DAMAGE.****SAF-T-DATA<sup>(tm)</sup>** Ratings (Provided here for your convenience)

Health Rating: 3 - Severe (Poison)

Flammability Rating: 0 - None

Reactivity Rating: 2 - Moderate

Contact Rating: 4 - Extreme (Corrosive)

Lab Protective Equip: GOGGLES &amp; SHIELD; LAB COAT &amp; APRON; VENT HOOD; PROPER GLOVES

Storage Color Code: White (Corrosive)

**Potential Health Effects****Inhalation:**

Corrosive! Inhalation of vapors can cause coughing, choking, inflammation of the nose, throat, and upper respiratory tract, and in severe cases, pulmonary edema, circulatory failure, and death.

**Ingestion:**

Corrosive! Swallowing hydrochloric acid can cause immediate pain and burns of the mouth, throat, esophagus and gastrointestinal tract. May cause nausea, vomiting, and diarrhea. Swallowing may be fatal.

**Skin Contact:**

Corrosive! Can cause redness, pain, and severe skin burns. Concentrated solutions cause deep ulcers and discolor skin.

**Eye Contact:**

Corrosive! Vapors are irritating and may cause damage to the eyes. Contact may cause severe burns and permanent eye damage.

**Chronic Exposure:**

Long-term exposure to concentrated vapors may cause erosion of teeth. Long term exposures seldom occur due to the corrosive properties of the acid.

**Aggravation of Pre-existing Conditions:**

Persons with pre-existing skin disorders or eye disease may be more susceptible to the effects of this substance.

## 4. First Aid Measures

**Inhalation:**

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

**Ingestion:**

DO NOT INDUCE VOMITING! Give large quantities of water or milk if available. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Skin Contact:**

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

**Eye Contact:**

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

## 5. Fire Fighting Measures

**Fire:**

Extreme heat or contact with metals can release flammable hydrogen gas.

**Explosion:**

Not considered to be an explosion hazard.

**Fire Extinguishing Media:**

If involved in a fire, use water spray. Neutralize with soda ash or slaked lime.

**Special Information:**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Structural firefighter's protective clothing is ineffective for fires involving hydrochloric acid. Stay away from ends of tanks. Cool tanks with water spray until well after fire is out.

## 6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Neutralize with alkaline material (soda ash, lime), then absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer! US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

J. T. Baker NEUTRASORB® or TEAM® 'Low Na+' acid neutralizers are recommended for spills of this product.

## 7. Handling and Storage

Store in a cool, dry, ventilated storage area with acid resistant floors and good drainage. Protect from physical damage. Keep out of direct sunlight and away from heat, water, and incompatible materials. Do not wash out container and use it for other purposes. When diluting, the acid should always be added slowly to water and in small amounts. Never use hot water and never add water to the acid. Water added to acid can cause uncontrolled boiling and splashing. When opening metal containers, use non-sparking tools because of the possibility of hydrogen gas being present. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

## 8. Exposure Controls/Personal Protection

**Airborne Exposure Limits:**

For Hydrochloric acid:

- OSHA Permissible Exposure Limit (PEL):

5 ppm (Ceiling)

- ACGIH Threshold Limit Value (TLV):

2 ppm (Ceiling), A4 Not classifiable as a human carcinogen

**Ventilation System:**

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

**Personal Respirators (NIOSH Approved):**

If the exposure limit is exceeded, a full facepiece respirator with an acid gas cartridge may be worn up to 50 times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

**Skin Protection:**

Rubber or neoprene gloves and additional protection including impervious boots, apron, or coveralls, as needed in areas of unusual exposure to prevent skin contact.

**Eye Protection:**

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

## 9. Physical and Chemical Properties

**Appearance:**

Colorless, fuming liquid.

**Odor:**

Pungent odor of hydrogen chloride.

**Solubility:**

Infinite in water with slight evolution of heat.

**Density:**

1.18

**pH:**

For HCL solutions: 0.1 (1.0 N), 1.1 (0.1 N), 2.02 (0.01 N)

**% Volatiles by volume @ 21C (70F):**

100

**Boiling Point:**

53C (127F) Azeotrope (20.2%) boils at 109C (228F)

**Melting Point:**

-74C (-101F)

**Vapor Density (Air=1):**

No information found.

**Vapor Pressure (mm Hg):**

190 @ 25C (77F)

**Evaporation Rate (BuAc=1):**

No information found.

## 10. Stability and Reactivity

**Stability:**

Stable under ordinary conditions of use and storage. Containers may burst when heated.

**Hazardous Decomposition Products:**

When heated to decomposition, emits toxic hydrogen chloride fumes and will react with water or steam to produce heat and toxic and corrosive fumes. Thermal oxidative decomposition produces toxic chlorine fumes and explosive hydrogen gas.

**Hazardous Polymerization:**

Will not occur.

**Incompatibilities:**

A strong mineral acid, concentrated hydrochloric acid is incompatible with many substances and highly reactive with strong bases, metals, metal oxides, hydroxides, amines, carbonates and other alkaline materials. Incompatible with materials such as cyanides, sulfides, sulfites, and formaldehyde.

**Conditions to Avoid:**

Heat, direct sunlight.

## 11. Toxicological Information

Inhalation rat LC50: 3124 ppm/1H; oral rabbit LD50: 900 mg/kg (Hydrochloric acid concentrated); investigated as a tumorigen, mutagen, reproductive effector.

-----\Cancer Lists\-----			
Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Hydrogen Chloride (7647-01-0)	No	No	3
Water (7732-18-5)	No	No	None

## 12. Ecological Information

**Environmental Fate:**

When released into the soil, this material is not expected to biodegrade. When released into the soil, this material may leach into groundwater.

**Environmental Toxicity:**

This material is expected to be toxic to aquatic life.

## 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

## 14. Transport Information

**Domestic (Land, D.O.T.)****Proper Shipping Name:** HYDROCHLORIC ACID**Hazard Class:** 8**UN/NA:** UN1789**Packing Group:** II**Information reported for product/size:** 475LB**International (Water, I.M.O.)**

**Proper Shipping Name:** HYDROCHLORIC ACID  
**Hazard Class:** 8  
**UN/NA:** UN1789  
**Packing Group:** II  
**Information reported for product/size:** 475LB

## 15. Regulatory Information

**Risk and Safety Phrases:**  
**Symbol:** C  
**Risk:** 34-37  
**Safety:** (1/2-)26-45

-----\Chemical Inventory Status - Part 1\-----				
Ingredient	TSCA	EC	Japan	Australia
Hydrogen Chloride (7647-01-0)	Yes	Yes	Yes	Yes
Water (7732-18-5)	Yes	Yes	Yes	Yes

-----\Chemical Inventory Status - Part 2\-----				
Ingredient	Korea	DSL	--Canada-- NDSL	Phil.
Hydrogen Chloride (7647-01-0)	Yes	Yes	No	Yes
Water (7732-18-5)	Yes	Yes	No	Yes

-----\Federal, State & International Regulations - Part 1\-----				
Ingredient	-SARA 302-		-SARA 313-	
	RQ	TPQ	List	Chemical Catg.
Hydrogen Chloride (7647-01-0)	5000	500*	Yes	No
Water (7732-18-5)	No	No	No	No

-----\Federal, State & International Regulations - Part 2\-----			
Ingredient	CERCLA	-RCRA-	-TSCA-
		261.33	8 (d)
Hydrogen Chloride (7647-01-0)	5000	No	No
Water (7732-18-5)	No	No	No

Chemical Weapons Convention: No    TSCA 12(b): No    CDTA: Yes  
 SARA 311/312: Acute: Yes    Chronic: Yes    Fire: No    Pressure: No  
 Reactivity: No    (Mixture / Liquid)

**Australian Hazchem Code:** 2R  
**Poison Schedule:** None allocated.  
**WHMIS:**

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

## 16. Other Information

**NFPA Ratings:** Health: 3 Flammability: 0 Reactivity: 1

**Label Hazard Warning:**

POISON! DANGER! CORROSIVE. LIQUID AND MIST CAUSE SEVERE BURNS TO ALL BODY TISSUE. MAY BE FATAL IF SWALLOWED OR INHALED. INHALATION MAY CAUSE LUNG DAMAGE.

**Label Precautions:**

Do not get in eyes, on skin, or on clothing.  
 Do not breathe vapor or mist.  
 Use only with adequate ventilation.  
 Wash thoroughly after handling.  
 Store in a tightly closed container.  
 Remove and wash contaminated clothing promptly.

**Label First Aid:**

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In all cases get medical attention immediately.

**Product Use:**

Laboratory Reagent.

**Revision Information:**

MSDS Section(s) changed since last revision of document include: 16.

**Disclaimer:**

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\*\*\*\*\*  
**Prepared by:** Environmental Health & Safety  
**Phone Number:** (314) 654-1600 (U.S.A.)

MSDS Number: S3338 \*\*\*\*\* Effective Date: 11/09/06 \*\*\*\*\* Supersedes: 01/12/04

<b>MSDS</b> <i>Material Safety Data Sheet</i>		24 Hour Emergency Telephone: 800-858-2151 CHEMTREC: 1-800-424-9300
		National Response in Canada: CANUTEC: 613-696-6566
From: Mallinckrodt Baker, Inc. 222 Red School Lane Phillipsburg, NJ 08865		Outside U.S. and Canada: Chemtec: 703-527-3887
J.T. Baker CHEMICALS		NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers should be used only in the event of chemical emergencies involving a spill, leak, fire, explosion or accident involving chemicals.
All non-emergency questions should be directed to Customer Service at 800-562-2537 for assistance.		

## SODIUM CHLORIDE

### 1. Product Identification

**Synonyms:** Salt; Rock Salt; Saline; Table Salt  
**CAS No.:** 7647-14-5  
**Molecular Weight:** 58.44  
**Chemical Formula:** NaCl  
**Product Codes:**  
 J.T. Baker: 3624, 3625, 3626, 3627, 3628, 3629, 4058, 4924  
 Mallinckrodt: 4577, 5519, 7361, 7503, 7532, 7534, 7540, 7544, 7576, 7581, 7713, V482

### 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Sodium Chloride	7647-14-5	99 - 100%	Yes

### 3. Hazards Identification

#### Emergency Overview

**WARNING! CAUSES EYE IRRITATION.**

**SAF-T-DATA<sup>(tm)</sup>** Ratings (Provided here for your convenience)

Health Rating: 1 - Slight  
 Flammability Rating: 0 - None  
 Reactivity Rating: 0 - None  
 Contact Rating: 1 - Slight  
 Lab Protective Equip: GOGGLES; LAB COAT; PROPER GLOVES  
 Storage Color Code: Green (General Storage)

#### Potential Health Effects

##### Inhalation:

May cause mild irritation to the respiratory tract.

##### Ingestion:

Very large doses can cause vomiting, diarrhea, and prostration. Dehydration and congestion occur in most internal organs. Hypertonic salt solutions can produce violent inflammatory reactions in the gastrointestinal tract.

##### Skin Contact:

May irritate damaged skin; absorption can occur with effects similar to those via ingestion.

##### Eye Contact:

Causes irritation, redness, and pain. (For salt concentrations greater than the normal saline present.)

##### Chronic Exposure:

No information found.

##### Aggravation of Pre-existing Conditions:

No information found.

### 4. First Aid Measures

**Inhalation:**

Remove to fresh air. Get medical attention for any breathing difficulty.

**Ingestion:**

If large amounts were swallowed, give water to drink and get medical advice.

**Skin Contact:**

Wash exposed area with soap and water. Get medical advice if irritation develops.

**Eye Contact:**

Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

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## 5. Fire Fighting Measures

**Fire:**

Not considered to be a fire hazard.

**Explosion:**

Not considered to be an explosion hazard.

**Fire Extinguishing Media:**

Use any means suitable for extinguishing surrounding fire.

**Special Information:**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

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## 6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal. Small amounts of residue may be flushed to sewer with plenty of water.

---

## 7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

---

## 8. Exposure Controls/Personal Protection

**Airborne Exposure Limits:**

None established.

**Ventilation System:**

In general, dilution ventilation is a satisfactory health hazard control for this substance. However, if conditions of use create discomfort to the worker, a local exhaust system should be considered.

**Personal Respirators (NIOSH Approved):**

For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

**Skin Protection:**

Wear protective gloves and clean body-covering clothing.

**Eye Protection:**

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

---

## 9. Physical and Chemical Properties

**Appearance:**

White crystals.

**Odor:**

Odorless.

**Solubility:**

36g/100cc water @ 20C (68F)

**Specific Gravity:**

2.16

**pH:**

6.7 - 7.3 (aqueous solution)

**% Volatiles by volume @ 21C (70F):**

0

**Boiling Point:**

1413C (2575F)

**Melting Point:**

801C (1474F)

**Vapor Density (Air=1):**

No information found.

**Vapor Pressure (mm Hg):**

1.0 @ 865C (1589F)

**Evaporation Rate (BuAc=1):**

No information found.

## 10. Stability and Reactivity

### Stability:

Stable under ordinary conditions of use and storage. Hygroscopic.

### Hazardous Decomposition Products:

When heated to above 801C (1474F) it emits toxic fumes of chloride and sodium oxide.

### Hazardous Polymerization:

Will not occur.

### Incompatibilities:

Lithium, bromine trifluoride.

### Conditions to Avoid:

Incompatibles.

## 11. Toxicological Information

Oral rat LD50: 3000 mg/kg.

Inhalation rat LC50: > 42 gm/m3 /1H.

Skin rabbit LD50: > 10 gm/kg. Investigated as a mutagen, reproductive effector.

-----\Cancer Lists\-----			
Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Sodium Chloride (7647-14-5)	No	No	None

## 12. Ecological Information

### Environmental Fate:

No information found.

### Environmental Toxicity:

No information found.

## 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

## 14. Transport Information

Not regulated.

## 15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----				
Ingredient	TSCA	EC	Japan	Australia
Sodium Chloride (7647-14-5)	Yes	Yes	Yes	Yes

-----\Chemical Inventory Status - Part 2\-----				
Ingredient	--Canada--			
	Korea	DSL	NDSL	Phil.
Sodium Chloride (7647-14-5)	Yes	Yes	No	Yes

-----\Federal, State & International Regulations - Part 1\-----				
Ingredient	-SARA 302-		-SARA 313-	
	RQ	TPQ	List	Chemical Catg.
Sodium Chloride (7647-14-5)	No	No	No	No

-----\Federal, State & International Regulations - Part 2\-----			
Ingredient	-RCRA-		-TSCA-
	CERCLA	261.33	8(d)
Sodium Chloride (7647-14-5)	No	No	No

Chemical Weapons Convention: No TSCA 12(b): No CMTA: No  
 SARA 311/312: Acute: Yes Chronic: No Fire: No Pressure: No  
 Reactivity: No (Pure / Solid)

**Australian Hazchem Code:** None allocated.

**Poison Schedule:** None allocated.

**WHMIS:**

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

## 16. Other Information

**NFPA Ratings:** Health: **1** Flammability: **0** Reactivity: **0**

**Label Hazard Warning:**

WARNING! CAUSES EYE IRRITATION.

**Label Precautions:**

Avoid contact with eyes.

Wash thoroughly after handling.

**Label First Aid:**

In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.

**Product Use:**

Laboratory Reagent.

**Revision Information:**

No Information Found.

**Disclaimer:**

\*\*\*\*\*  
Mallinckrodt Baker, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. MALLINCKRODT BAKER, INC. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, MALLINCKRODT BAKER, INC. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.  
\*\*\*\*\*

Prepared by: Environmental Health & Safety

Phone Number: (314) 654-1600 (U.S.A.)

MSDS Number: S4202 \*\*\*\*\* Effective Date: 05/19/08 \*\*\*\*\* Supercedes: 07/11/05

<b>MSDS</b> Material Safety Data Sheet		24-hour Emergency Telephone: 508-658-2151 CHEMTEC: 1-800-424-6300
From: Mallinckrodt Baker, Inc. 222 Red School Lane Phillipsburg, NJ 08865		National Response in Canada CANUTEC: 613-996-6566
Mallinckrodt CHEMICALS		Outside U.S. and Canada Chemtec: 703-527-0887
J.T. Baker		NOTE: CHEMTEC, CANUTEC and National Response Center emergency numbers are to be used only in the event of chemical emergencies involving a spill, leak, fire, explosion or accident involving chemicals.
All non-emergency questions should be directed to Customer Service at 800-562-2637, for assistance.		

## SODIUM IODIDE

### 1. Product Identification

**Synonyms:** Sodium iodine; Sodium monoiodide  
**CAS No.:** 7681-82-5  
**Molecular Weight:** 149.89  
**Chemical Formula:** NaI  
**Product Codes:**  
 J.T. Baker: 3748, 3750  
 Mallinckrodt: 1136, 1141, 1143, 1206

### 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Sodium Iodide	7681-82-5	90 ~ 100%	Yes

### 3. Hazards Identification

#### Emergency Overview

**WARNING! HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. CHRONIC EXPOSURE MAY PRODUCE IODISM**

**SAF-T-DATA<sup>(TM)</sup>** Ratings (Provided here for your convenience)

Health Rating: 2 - Moderate (Life)  
 Flammability Rating: 0 - None  
 Reactivity Rating: 1 - Slight  
 Contact Rating: 2 - Moderate  
 Lab Protective Equip: GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES  
 Storage Color Code: Green (General Storage)

#### Potential Health Effects

##### Inhalation:

Inhalation of dust may cause coughing, choking, with variable symptoms of headache, dizziness, and weakness. May cause lung edema.

##### Ingestion:

Causes irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhea.

##### Skin Contact:

Causes irritation to skin. Symptoms include redness, itching, and pain.

##### Eye Contact:

Causes irritation, redness, and pain.

##### Chronic Exposure:

A mild toxic syndrome "iodism" may result from chronic iodide overdoses. May cause salivation, sneezing, conjunctivitis, headache, fever, laryngitis, bronchitis, stomatitis, and parotitis (iodine mumps). Prolonged or repeated skin exposure may cause skin rashes.

##### Aggravation of Pre-existing Conditions:

No information found.

### 4. First Aid Measures

**Inhalation:**

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Ingestion:**

Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

**Skin Contact:**

Wipe off excess material from skin then immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

**Eye Contact:**

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

## 5. Fire Fighting Measures

**Fire:**

Not considered to be a fire hazard.

**Explosion:**

Not considered to be an explosion hazard.

**Fire Extinguishing Media:**

Use any means suitable for extinguishing surrounding fire.

**Special Information:**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

## 6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust. Small amounts of residue may be flushed to sewer with plenty of water.

## 7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Protect from light. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

## 8. Exposure Controls/Personal Protection

**Airborne Exposure Limits:**

None established.

**Ventilation System:**

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

**Personal Respirators (NIOSH Approved):**

For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

**Skin Protection:**

Wear protective gloves and clean body-covering clothing.

**Eye Protection:**

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

## 9. Physical and Chemical Properties

**Appearance:**

White granular or colorless crystals

**Odor:**

Odorless.

**Solubility:**

184 g/100 ml water @ 25C

**Specific Gravity:**

3.67

**pH:**

8 - 9.5

**% Volatiles by volume @ 21C (70F):**

0

**Boiling Point:**

1300C (2372F)

**Melting Point:**

651C (1204F)

**Vapor Density (Air=1):**

No information found.

**Vapor Pressure (mm Hg):**  
1 @ 767C (1413F)  
**Evaporation Rate (BuAc=1):**  
No information found.

## 10. Stability and Reactivity

**Stability:**  
Stable under ordinary conditions of use and storage. Absorbs up to 5% moisture on exposure to air and becomes brown due to liberation of iodine.  
**Hazardous Decomposition Products:**  
When heated to decomposition it emits toxic fumes of iodine and sodium oxide.  
**Hazardous Polymerization:**  
Will not occur.  
**Incompatibilities:**  
Alkali metals, chloral hydrate, acids tartaric acid, potassium chlorate, metallic salts, iodine. Reacts violently with bromine trifluoride, perchloric acid, and oxidants.  
**Conditions to Avoid:**  
Light and incompatibles.

## 11. Toxicological Information

**Toxicological Data:**  
Oral rat LD50: 4340 mg/kg. Irritation data: skin rabbit, standard Draize: 500 mg/24H, moderate; eye rabbit, standard Draize: 100 mg/24H, moderate. Investigated as a reproductive effector.  
**Reproductive Toxicity:**  
The occasional use of iodides for asthma in pregnancy has resulted in fetal death, severe goiter and cretinoid appearance of the newborn.

-----\Cancer Lists\-----			
Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Sodium Iodide (7681-82-5)	No	No	None

## 12. Ecological Information

**Environmental Fate:**  
No information found.  
**Environmental Toxicity:**  
No information found.

## 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

## 14. Transport Information

Not regulated.

## 15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----				
Ingredient	TSCA	EC	Japan	Australia
Sodium Iodide (7681-82-5)	Yes	Yes	Yes	Yes
-----\Chemical Inventory Status - Part 2\-----				
Ingredient	--Canada--			
	Korea	DSL	NDSL	Phil.
Sodium Iodide (7681-82-5)	Yes	Yes	No	Yes
-----\Federal, State & International Regulations - Part 1\-----				
Ingredient	-SARA 302-		-SARA 313-	
	RQ	TPQ	List	Chemical Catg.
Sodium Iodide (7681-82-5)	No	No	No	No
-----\Federal, State & International Regulations - Part 2\-----				
Ingredient	-RCRA-		-TSCA-	
	CERCLA	261.33	8(d)	

Sodium Iodide (7681-82-5)

No

No

No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No  
SARA 311/312: Acute: Yes Chronic: Yes Fire: No Pressure: No  
Reactivity: No (Pure / Solid)

**Australian Hazchem Code:** None allocated.**Poison Schedule:** None allocated.**WHMIS:**

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

## 16. Other Information

**NFPA Ratings:** Health: 2 Flammability: 0 Reactivity: 1**Label Hazard Warning:**

WARNING! HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. CHRONIC EXPOSURE MAY PRODUCE IODISM

**Label Precautions:**

Avoid contact with eyes, skin and clothing.

Avoid breathing dust.

Keep container closed.

Use only with adequate ventilation.

Wash thoroughly after handling.

**Label First Aid:**

In case of contact, wipe off excess material from skin then immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. In all cases, get medical attention.

**Product Use:**

Laboratory Reagent.

**Revision Information:**

No Changes.

**Disclaimer:**

\*\*\*\*\*  
Mallinckrodt Baker, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. MALLINCKRODT BAKER, INC. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, MALLINCKRODT BAKER, INC. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.  
\*\*\*\*\*

Prepared by: Environmental Health & Safety

Phone Number: (314) 654-1600 (U.S.A.)



ZaCh  
S Y S T E M

# Fax

**To:** Kelli Lofton / CES

**From:** Ron Smith

**Fax:** 713-676-1676

**Pages:** 5

**Phone:** 281-842-0201

**Date:** 7/15/2008

**Re:** NMP Wastewater profile

**CC:** Matt Bowman

☐ Urgent

☒ For Review

☐ Please Comment

☐ Please Reply

☐ Please Recycle

• **Comments:** Please process accordingly..

Thanks,  
Ron Smith

2893  
Midstate Environ Services, LP



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Material / Product Approval Letter

Date 7/21/2008

Dear Don Burks

Thank you for choosing CES Environmental Services, Inc. for your material / product recycling needs. The following material has been approved at our facility in Houston, TX. If the material received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # 2893

Expiration Date 7/21/2010

**Producer:** Midstate Environmental Services LP  
**Address:** 2203 Tower Road  
Robstown, TX 78380

### Material / Product Information

**Name of Material / Product** Sodium chlorite solution

**Container Type:**

### **Detailed Description of Process Generating or Producing the Material / Product:**

Unused material that has diminished in oxidizing potential

**Color:** slight yellow

**Odor:** slight bleach

**pH:** 10-11

**Physical State:**

**Incompatibilities:** acids

**Safety Related Data/Special Handling:**

level c

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

gmp  
Profiled as pure product Sodium  
chlorite (10,000 gal). If the density  
is less than 1.0 (1.10) the material  
is a reject. The volume is too  
high for CES to use as an oxidizer  
+ store. MUST be sold as a



**CES Environmental  
Services, Inc.**

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
http://www.cesenvironmental.com  
TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

AB

product to a vendor.

**SECTION 1: Generator Information**

Company: Midstate Environmental Service  
Address: 2203 Tower Road  
City, State, Zip: Robstown, TX  
Contact: Don Burks Title: Operations Manager  
Phone No: 361-387-2171 Fax No: 361-767-7720  
24/hr Phone: CES-713-676-1460  
U.S. EPA I.D. No:  
State I.D. SIC Code:

**SECTION 2: Billing Information - ☐ Same as Above**

Company: Midstate Environmental Services  
Address: P.O. Box 261180  
City, State, Zip: Corpus Christi, TX 78426-1180  
Contact: Don Burks Title: Operations Manager  
Phone No: 361-387-2171 Fax No: 361-767-7720

**SECTION 3: General Description of the Waste**

Name of Waste: Sodium Chlorite Solution

Detailed Description of Process Generating Waste: Unused material that has diminished in oxidizing potential

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: slight yellow

Odor: slight bleach

Specific Gravity (water=1): 1.0

Density: 8 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)  
Container Size: 5000

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☐ Yearly

Number of Units (containers): 2 Other: one-time

Texas State Waste Code No: NA-Product for Re-use (Scrubber Solution)

Proper U.S. DOT Shipping Name: Non-RCRA; Non-DOT Regulated Material

Class: NA UN/NA: NA PG: NA RQ: NA

Flash Point none	pH 10-11	Reactive Sulfides 0mg/l	Reactive Cyanides 0mg/l	Solids <1%
Oil & Grease none mg/l	TOC none mg/l	Zinc 0mg/l	Copper 0mg/l	Nickel 0mg/l

**SECTION 4: Physical and Chemical Data**

COMPONENTS TABLE		Concentration	Units
The waste consists of the following materials		Ranges are acceptable	or %
Sodium Chlorite		3-10	%
Water		90-97	%

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

Level C

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.

CES Evaluation Report

**SECTION 7: Incompatibilities**

Please list all incompatibilities (if any):

acids

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: ☒ X  
 TCLP Volatiles: ☒ X  
 TCLP Semi-Volatiles: ☒ X  
 Reactivity: ☒ X  
 Corrosivity: ☒ X  
 Ignitability: ☒ X

**SECTION 9: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☒ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: William K. King Date: 7/18/08

Printed Name/Title: William K. King, Jr. Operations Manager

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Compliance Officer: <u>Robert R. Hayden</u>	
Date: <u>7-21-08</u>	Approved <input checked="" type="checkbox"/> Rejected <input type="checkbox"/>
Approval Number: <u>2893</u>	

Flash Point none	pH 10-11	Reactive Sulfides 0mg/l	Reactive Cyanides 0mg/l	Solids <1%
Oil&Grease nonemg/l	TOC nonemg/l	Zinc 0mg/l	Copper 0mg/l	Nickel 0mg/l

#### **SECTION 4: Physical and Chemical Data**

<b>COMPONENTS TABLE</b>	<b>Concentration</b>	<b>Units</b>
<b>The waste consists of the following materials</b>	<b>Ranges are acceptable</b>	<b>or %</b>
Sodium Chlorite	3-10	%
Water	90-97	%

#### **SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

Level C

#### **SECTION 6: Attached Supporting Documents**

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.  
CES Evaluation Report

#### **SECTION 7: Incompatibilities**

Please list all incompatibilities (if any):

acids

#### **SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals: X  
TCLP Volatiles: X  
TCLP Semi-Volatiles: X  
Reactivity: X  
Corrosivity: X  
Ignitability: X

#### **SECTION 9: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☒ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name/Title: \_\_\_\_\_

<b>CES USE ONLY (DO NOT WRITE IN THIS SPACE)</b>	
Compliance Officer: _____	
Date: _____	Approved Rejected
Approval Number: _____	

**SECTION 10: Waste Receipt Classification Under 40 CFR 437**

Is this material a wastewater or wastewater sludge? ☐ YES ☒ NO

If 'Yes', complete this section.

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.**

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

- (1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.
- (2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

- (3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcategory

☐ Oils Subcategory

☐ Organics Subcategory

#### **SECTION 11: Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

12 cents per gallon. If CES does the trans it is \$70.00/hour plus FSC

**2. Contamination Limits (maximum limit before surcharges apply):**

none

**3. Surcharge Pricing:**

none

**4. Special Testing Requirements:**

~~Verify material is the same as the sample evaluation~~ Test the density. If the density is less than 1.1 then the material is non conforming and is a reject, the customer must explain why the density is less than 1.2.

**5. Treatment and Handling Protocol:**

Cannot

Re-use as a scrubber solution - Too much volume - Sell as a sodium chlorite product. Too high of a volume to process at CES as an oxidizer. Must have an outside source to sell as a product.

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☐ Subcategory B

☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**7. Tests for Product Recovered/Recycled (if applicable):**

none

**8. Management for Product Recovered/Recycled (if applicable):**

none



4904 Griggs Road  
Houston, TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1676

To: Gary Brauckman  
Cc: Keli Lofton, Gary Peterson, Prabhaker

Date: 06/17/08

From: Miles Root

Lab Memo: 08-107

Subject: **Midstates Environmental Evaluation 0608-37**

A sample of bleach from Midstates Environmental has been evaluated for use at CES. This sample is evaluation 0608-37 and is a sodium chlorite solution used as a bleaching solution.

The main application of sodium chlorite is the generation of chlorine dioxide for bleaching and stripping of textiles, pulp, and paper. Sodium chlorite is a strong oxidizer. The specific gravity of this sample is 1.205 at ambient temperature which equates to an approximate strength of 25% sodium chlorite. The [www.oxy.com](http://www.oxy.com) web site has lots of useful information about sodium chlorite and other bleaching chemicals that I used as a reference. The 25% solution is a standard solution that is sold. Marketing this material is one outlet that we have for this stream.

We can use some of this material in our wastewater plant but not an entire load at one time, due to the strong oxidizing effect of sodium chlorite. It readily reacts with organics and may generate excessive heat if processed into our system in one concentrated batch. We cannot receive a load of this material and process it as one batch into our system. We could move it into one of our frac tanks and process it through over a 24 hour period into our waste water. There is no treatment that we will actually do with this stream, it's just a matter of moving it through our waste water treatment system at a pace that it can handle.

Marketing this material to generators of chlorine dioxide will be more profitable. Otherwise, we will just have to process this material at an acceptable pace when it is received.

2894  
El Paso Energy

7E  
8-4-09  
LAB  
T-35



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/22/2008

Dear Zac or Dave

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2894

**Expiration Date** 7/22/2010

**Generator:** El Paso Energy

**Address:** 1001 Louisiana #T-3180  
Houston, TX 77002

### Waste Information

**Name of Waste:** DTM acrylic semi gloss

**TCEQ Waste Code #:** CESQ2191

**Container Type:**

**Detailed Description of Process Generating Waste:**

general maintenance

**Color:** na

**Odor:** none

**pH:** na

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

gfp

OK



DB

4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676

<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

**SECTION 1: Generator Information**

Company: EL PASO ENERGY  
Address: 1001 LOUISIANA #T-3180  
City: HOUSTON State: TX Zip: 77002  
Contact: JEFF FRENCH Title: MAINT. MANAGER  
Phone Number: 713-420-4027 Fax Number: \_\_\_\_\_  
24/hr Phone Number: 800-468-1760  
US EPA ID No: TXD987990041  
State ID No: CESQG SIC Code: \_\_\_\_\_

**SECTION 2: Billing Information -** ☐ Same as Above

Company: CKG SERVICES  
Address: 10707 HONEA EGYPT ROAD  
City: MONTGOMERY State: TX Zip: 77316  
Contact: ZAC MCKAUGHAN Title: PRESIDENT  
Phone Number: 936-483-3662 Fax Number: 936-756-1226

**SECTION 3: General Description of the Waste**

Name of Waste: DTM ACRYLIC SEMI GLOSS  
Detailed Description of Process Generating Waste: GENERAL MAINTENANCE

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: NA Odor: NONE

Specific Gravity (water=1): NA Density: NA lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☒ Monthly ☐ Yearly ☐ One-Time

Quantity: FIVE

☐ Yes ☒ No

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)  
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009  
☐ D010 ☐ D011

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☒ No

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No

**Texas State Waste Code Number:** CESQ2191

Proper US DOT Shipping Name:		NON REGULATED/NON DOT/NON HAZ			
Class:	NA	UN/NA:	NA	PG:	NA
				RQ:	NA

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
NA		NA		NA <u>mg/l</u>		NA <u>mg/l</u>		NA %	
Oil & Grease		TOC		Zinc		Copper		Nickel	
NA	<u>mg/l</u>	NA	<u>mg/l</u>	NA	<u>mg/l</u>	NA	<u>mg/l</u>	NA	<u>mg/l</u>

[illegible]

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

NONE

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

None Known

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	0
TCLP Volatiles:	0
TCLP Semi-Volatiles:	0
Reactivity:	0
Corrosivity:	0
Ignitability:	0

**SECTION 9: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_

Date: 7/14/2008

Printed Name/Title: ZAC MCKAUGHAN / PRESIDENT

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: \_\_\_\_\_

Date: 7-22-08

☒ Approved

☐ Rejected

Approval Number: \_\_\_\_\_

2894



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

\$65/DM

**2. Contamination Limits (maximum limit before surcharges apply):**

None

**3. Surcharge Pricing:**

NA

**4. Special Testing Requirements:**

Make sure product fits MSDS

**5. Treatment and Handling Protocol:**

Class 1 Liquids or Sludge box depending on consistency

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☐ Subcategory B

☐ Subcategory C

**7. Tests for Product Recovered/Recycled (if applicable):**

Compatibility with other light ends

**8. Management for Product Recovered/Recycled (if applicable):**

Put recovered hydrocarbons into light ends if compatible



## C.I. Pigment Black 7

Y N 5.0 001333-86-4 3.5mg/M3 3.5mg/M3 N/E N/E N/A

\*\*\*\*\*  
This product contains one or more reported carcinogens or suspected carcinogens which are noted NTP, IARC, or OSHA-Z in the other limits recommended column.  
\*\*\*\*\*

Note: This product contains pigments which may become a dust nuisance when removed by abrasive blasting, sanding, or grinding.  
This product may contain small amounts of materials known to the State of California to cause cancer and reproductive harm.  
-----

## SECTION III PHYSICAL DATA

-----  
BOILING RANGE: N/A WT/GALLON: 8.7 to 10.1 %VOL BY VOLUME: 59.4 to 63.0  
EVAPORATION RATE: SLOWER THAN ETHER VAPOR DENSITY: HEAVIER THAN AIR  
-----

## SECTION IV FIRE AND EXPLOSION HAZARD DATA

-----  
D.O.T. FLAMMABILITY CLASS.: NOT REGULATED FLASH POINT: > 250 F. PMCC  
LEL: Not Applicable  
EXTINGUISHING MEDIA: FOAM CO2 DRY CHEMICAL WATER FOG  
UNUSUAL FIRE AND EXPLOSION HAZARDS:  
Toxic gases may form when product burns.  
Closed containers may burst if exposed to extreme heat or fire.  
SPECIAL FIRE FIGHTING PROCEDURES:  
Cool exposed containers with water. Use self-contained breathing apparatus.  
-----

## SECTION V HEALTH HAZARD DATA

-----  
EFFECTS OF OVEREXPOSURE - ACUTE:  
Inhalation - Harmful if inhaled. May affect the brain or nervous system causing dizziness, headache or nausea.  
Contact - Causes eye irritation.  
Contact - Causes skin irritation.  
Ingestion - Harmful if swallowed. Irritation of the digestive tract and nervous system depression (drowsiness, dizziness, loss of coordination and fatigue).  
EFFECTS OF OVEREXPOSURE - CHRONIC:  
Notice: contains chemicals which may cause liver, kidney, thyroid and blood disorder upon overexposure based on animal data.  
IARC has classified Carbon Black as possibly carcinogenic for humans (2B).  
NOTICE: Reports have associated permanent brain and nervous system damage with repeated, prolonged overexposure to solvents among persons engaged in the painting trade. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.  
MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE:  
None expected when used in accordance with Safe Handling and Use Information (Section VIII).  
Ingestion - Give 1 or 2 glasses of water to dilute.  
induce vomiting if the subject is conscious. Obtain medical attention.  
PRIMARY ROUTE(S) OF ENTRY: DERMAL INHALATION INGESTION  
EMERGENCY AND FIRST AID PROCEDURES :  
Inhalation - Remove to fresh air. Get medical help for any breathing difficulty.  
Eye Contact - Flush thoroughly with water. Call physician.  
-----

Skin Contact - Wash with soap and water.

---

SECTION VI REACTIVITY DATA

---

STABILITY: STABLE HAZARDOUS POLYMERIZATION WILL NOT OCCUR

CONDITIONS TO AVOID: Elevated temperatures

HAZARDOUS DECOMPOSITION PRODUCTS:

Burning may produce carbon dioxide and carbon monoxide.

INCOMPATIBILITY (MATERIALS TO AVOID): None reasonably foreseeable.

---

SECTION VII SPILL OR LEAK PROCEDURES

---

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Flush with water. Absorb with sawdust or rags.

WASTE DISPOSAL METHOD:

Conventional procedures in compliance with local, state and federal regulations. Do not incinerate sealed containers.

---

SECTION VIII SAFE HANDLING AND USE INFORMATION

---

RESPIRATORY PROTECTION:

Wear a properly fitted vapor/particulate respirator approved by NIOSH for use with paints during application or sanding and until all vapors and spray mist are exhausted. In confined spaces or in situations where continuous spray operations are typical, or if proper respirator fit is not possible, wear a positive-pressure, supplied air respirator approved by NIOSH.

VENTILATION:

Adequate to maintain working atmosphere below T.L.V. and L.E.L.

(See Sect. II for ingredient data and concentrations). Mechanical exhaust may be required in confined areas.

PROTECTIVE GLOVES: Solvent impermeable gloves are required.

EYE PROTECTION : Splash goggles or safety glasses with side shields.

OTHER PROTECTIVE EQUIPMENT: Clothing adequate to protect skin.

HYGIENIC PRACTICES:

Remove and wash clothing before reuse. Wash hands before eating, smoking or using the washroom.

---

SECTION IX SPECIAL PRECAUTIONS

---

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Do not throw or drop containers.

OTHER PRECAUTIONS :

Avoid contact with eyes and prolonged contact with skin or breathing of spray mist or sanding dust.

Close container after each use. Keep out of reach of children. Do not take internally.

---

SECTION XX

---

HMIS (Hazardous Materials Identification System) (R) NPCA

HMIS is a recognized workplace Hazard Communications System as required by OSHA (29 CFR 1910.1200). Information on establishing a compliant hazardous communication program using HMIS is available from:

American Labelmark Co., Inc., Labelmaster Division  
5724 N. Pulaski Rd., Chicago, IL 60646  
1-800-621-5808

2871  
Mid South



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/7/2008

Dear Zac or Dave

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2871

**Expiration Date** 7/7/2010

**Generator:** Mid South

**Address:** 22490 Hwy 105 West  
Montgomery, TX 77356

### Waste Information

**Name of Waste:** Gas

**TCEQ Waste Code #:** Recycle

**Container Type:**

**Detailed Description of Process Generating Waste:**

Unused/out of date gas

**Color:** clear-brown

**Odor:** petroleum

**pH:** 3-11

**Physical State:**

**Incompatibilities:** oxidizers

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

LRP  
Benzene treat  
on water.



CES Environmental  
Services, Inc.

DB

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>  
TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

**SECTION 1: Material Producer Information**

Company: MID SOUTH  
Address: 22490 HWY 105 WEST  
City, State, Zip: MONTGOMERY, TX 77356  
Contact: HEATH BROWN Title: \_\_\_\_\_  
Phone No: 979-220-8604 Fax No: \_\_\_\_\_  
24/hr Phone: 281-541-4829  
U.S. EPA ID. No: CESQ  
State ID. TXCESQG SIC Code: \_\_\_\_\_

**SECTION 2: Billing Information - ☐ Same as Above**

Company: CKG SERVICES LLC  
Address: 10707 HONEA EGYPT  
City, State, Zip: MONTGOMERY, TX 77316  
Contact: ZAC MCKAUGHAN Title: PRESIDENT  
Phone No: 281-541-4829 Fax No: 936-756-1226

**SECTION 3: General Description of the Material / Product**

Name of Material / Product: GAS

Detailed Description of Process Generating or Producing the Material / Product: UNUSED/OUT OF DATE GAS

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: clear PETROLEUM brown Odor: PETROLEUM

Specific Gravity (water=1): NA Density: NA lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☐ Truck ☒ Other (explain)  
Container Size: \_\_\_\_\_ LARGE TANK

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☒ Yearly

Number of Units (containers): 600 GALLONS Other: \_\_\_\_\_

Proper U.S. DOT Shipping Name:

Recycle Flammable  
GAS combustible liquid, nos (Gasoline)

Class: NA 3

UN/NA: NA 1993

PG: NA III

RQ: NA

Flash Point NA 2130	pH NA 3-11	N/A	N/A	Solids NA%
Oil & Grease NA mg/l	TOC NA mg/l	Zinc NA mg/l	Copper NA mg/l	Nickel NA mg/l

#### SECTION 4: Physical and Chemical Data

COMPONENTS TABLE		Concentration	Units
The material / product consists of the following materials		Ranges are acceptable	or %
GAS	95-100		%
WATER	0-5		%

#### SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.

NA

#### SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.

NA

#### SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

NA Oxidizers

#### SECTION 8: Material Producer's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_ Date: 6-30-08

Printed Name/Title: ZAC MCKAUGHAN/PRESIDENT

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Technical Manager: [Signature]

Date: 7-7-08 ☒ Approved ☐ Rejected

Approval Number: 2871

**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

*55,000*  
If high water content then .30/gal up to ~~55,000~~ TOC on the water phase and no payment for product  
If Product is good then CES pays .30/gal if less than 2% water

*If water is GT 2% then the water treat cost is \$.11/gal.*

**2. Contamination Limits (maximum limit before surcharges apply):**

Solids-Call Dan if Solids are present-May contain Benzene . *segregate solids*

**3. Surcharge Pricing:**

Call if TOC on water is above 55,000 ppm & water is ~~GT~~ *GT* 2%.

**4. Special Testing Requirements:**

Fill out receiving report, % water, % solids, % gasoline, *phenols*

**5. Treatment and Handling Protocol:**

Good gasoline goes to lightends, Water needs to be oxidized to remove benzene prior to discharge . *The water phase requires 3% peroxide to treat.*

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☐ Subcategory B

☒ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**7. Tests for Product Recovered/Recycled (if applicable):**

Compatibility with other light ends

**8. Management for Product Recovered/Recycled (if applicable):**

Put recovered hydrocarbons into light ends if compatible

# HALLIBURTON

## MATERIAL SAFETY DATA SHEET

Product Trade Name: **CLAYSEAL PLUS**

Revision Date: 02-Jan-2007

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: CLAYSEAL PLUS  
Synonyms: None  
Chemical Family: Ethoxylated polyamine  
Application: Shale stabilizer  
Manufacturer/Supplier: Halliburton Energy Services  
P.O. Box 1431  
Duncan, Oklahoma 73536-0431  
Emergency Telephone: (281) 575-5000

Prepared By: Chemical Compliance  
Telephone: 1-580-251-4335

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Hydrochloric acid	7647-01-0	1 - 5%	2 ppm	5 ppm
Propylene glycol	57-55-6	10 - 30%	10 mg/m <sup>3</sup>	15 mg/m <sup>3</sup>
Polyalkeneamine		10 - 30%	Not applicable	Not applicable

### 3. HAZARDS IDENTIFICATION

Hazard Overview: May cause eye, skin, and respiratory irritation. May cause headache, dizziness, and other central nervous system effects. May be harmful if swallowed.

### 4. FIRST AID MEASURES

**Inhalation** If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.

**Skin** In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention. Remove contaminated clothing and launder before reuse.

**Eyes** In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

**Ingestion** Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

**Notes to Physician** Not Applicable

## 5. FIRE FIGHTING MEASURES

Flash Point/Range (F):	Not Determined
Flash Point/Range (C):	Min: > 200
Flash Point Method:	Not Determined
Autoignition Temperature (F):	Min: > 93
Autoignition Temperature (C):	PMCC
Flammability Limits in Air - Lower (%):	Not Determined
Flammability Limits in Air - Upper (%):	Not Determined

**Fire Extinguishing Media** Water fog, carbon dioxide, foam, dry chemical.

**Special Exposure Hazards** Use water spray to cool fire exposed surfaces. Decomposition in fire may produce toxic gases.

**Special Protective Equipment for Fire-Fighters** Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

**NFPA Ratings:** Health 2, Flammability 1, Reactivity 0  
**HMIS Ratings:** Flammability 1, Reactivity 0, Health 2

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautionary Measures** Use appropriate protective equipment.

**Environmental Precautionary Measures** Prevent from entering sewers, waterways, or low areas.

**Procedure for Cleaning / Absorption** Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Scoop up and remove.

## 7. HANDLING AND STORAGE

**Handling Precautions** Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Wash hands after use. Launder contaminated clothing before reuse.

**Storage Information** Store in a cool well ventilated area. Keep container closed when not in use. Product has a shelf life of 36 months. Store away from oxidizers. Store away from alkalis.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls** Use in a well ventilated area.

**Respiratory Protection** Organic vapor/acid gas respirator.

**Hand Protection** Impervious rubber gloves.

**Skin Protection** Rubber apron.

**Eye Protection** Chemical goggles; also wear a face shield if splashing hazard exists.

**Other Precautions** Eyewash fountains and safety showers must be easily accessible.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Color:	Clear light yellow
Odor:	Amine
pH:	6-8
Specific Gravity @ 20 C (Water=1):	1.04-1.07

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Density @ 20 C (lbs./gallon):	8.8
Bulk Density @ 20 C (lbs/ft3):	Not Determined
Boiling Point/Range (F):	Not Determined
Boiling Point/Range (C):	Not Determined
Freezing Point/Range (F):	15
Freezing Point/Range (C):	-9
Vapor Pressure @ 20 C (mmHg):	Not Determined
Vapor Density (Air=1):	Not Determined
Percent Volatiles:	Not Determined
Evaporation Rate (Butyl Acetate=1):	Not Determined
Solubility in Water (g/100ml):	Soluble
Solubility in Solvents (g/100ml):	Not Determined
VOCs (lbs./gallon):	Not Determined
Viscosity, Dynamic @ 20 C (centipoise):	2-15
Viscosity, Kinematic @ 20 C (centistokes):	Not Determined
Partition Coefficient/n-Octanol/Water:	Not Determined
Molecular Weight (g/mole):	Not Determined

## 10. STABILITY AND REACTIVITY

Stability Data:	Stable
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid	None known.
Incompatibility (Materials to Avoid)	Strong oxidizers. Strong alkalis.
Hazardous Decomposition Products	Oxides of nitrogen. Carbon monoxide and carbon dioxide.
Additional Guidelines	Not Applicable

## 11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure	Eye or skin contact, inhalation.
Inhalation	May cause respiratory irritation. May cause central nervous system depression including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.
Skin Contact	May cause severe skin irritation.
Eye Contact	May cause severe eye irritation.
Ingestion	May cause central nervous system depression including headache, dizziness, drowsiness, muscular weakness, incoordination, slowed reaction time, fatigue blurred vision, slurred speech, giddiness, tremors and convulsions.
Aggravated Medical Conditions	Skin disorders. Eye ailments.
Chronic Effects/Carcinogenicity	No data available to indicate product or components present at greater than 1% are chronic health hazards.
Other Information	None known.
Toxicity Tests	

Oral Toxicity:	Not determined
Dermal Toxicity:	Not determined
Inhalation Toxicity:	Not determined
Primary Irritation Effect:	Not determined
Carcinogenicity	Not determined
Genotoxicity:	Not determined
Reproductive / Developmental Toxicity:	Not determined

## 12. ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air)	Not determined
Persistence/Degradability	Not determined
Bio-accumulation	Not Determined

### Ecotoxicological Information

Acute Fish Toxicity:	Not determined
Acute Crustaceans Toxicity:	Not determined
Acute Algae Toxicity:	Not determined

Chemical Fate Information	Not determined
Other Information	Not applicable

## 13. DISPOSAL CONSIDERATIONS

Disposal Method	Disposal should be made in accordance with federal, state, and local regulations.
Contaminated Packaging	Follow all applicable national or local regulations.

## 14. TRANSPORT INFORMATION

### Land Transportation

DOT  
Not restricted

Canadian TDG  
Not restricted

ADR Not restricted

### Air Transportation

ICAO/IATA Not restricted

### Sea Transportation

IMDG Not restricted

## Other Shipping Information

Labels: None

## 15. REGULATORY INFORMATION

### US Regulations

US TSCA Inventory	Product contains one or more components not listed on inventory.
EPA SARA Title III Extremely Hazardous Substances	Not applicable
EPA SARA (311,312) Hazard Class	Acute Health Hazard
EPA SARA (313) Chemicals	This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).
EPA CERCLA/Superfund Reportable Spill Quantity For This Product	Not applicable.
EPA RCRA Hazardous Waste Classification	If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.
California Proposition 65	All components listed do not apply to the California Proposition 65 Regulation.
MA Right-to-Know Law	One or more components listed.
NJ Right-to-Know Law	One or more components listed.
PA Right-to-Know Law	One or more components listed.

### Canadian Regulations

Canadian DSL Inventory	Product contains one or more components not listed on inventory.
WHMIS Hazard Class	E Corrosive Material

## 16. OTHER INFORMATION

The following sections have been revised since the last issue of this MSDS  
Not applicable

**Additional Information** For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Material Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.

### Disclaimer Statement

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

CLAVETAL 5110

2872

MTI Environmental



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/8/2008

Dear Troy Swearingen

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # 2872

Expiration Date 7/8/2010

**Generator:** MTI Environmental  
**Address:** 2150 Pansy Rd  
Pasadena, TX 77503

### Waste Information

**Name of Waste:** RCRA empty containers

**TCEQ Waste Code #:** Recycle

**Container Type:**

**Detailed Description of Process Generating Waste:**

Empty totes and drums

**Color:** na

**Odor:** na

**pH:** na

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

**CES Environmental Services, Inc.**

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676

<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit No: 30948

U.S. EPA ID No: TXD008950461 ISWR No: 30900

JD

GRP  
No Generator  
authorized Signature  
on paperwork.

**SECTION 1: Generator Information**

Company: MTI Environmental  
Address: 2150 Pansy Rd  
City, State, Zip: Pasadena, TX 77503  
Contact: Trey Swearingen Title: \_\_\_\_\_  
Phone No: 832-257-6128 Fax: \_\_\_\_\_  
24 / HR Phone: 832-257-6128  
U.S EPA I.D No: TX CES9  
State I.D: CES96 SIC Code \_\_\_\_\_

**SECTION 2: Billing Information**

Company: Same as Above  
Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Contact: \_\_\_\_\_ Title: \_\_\_\_\_  
Phone No: ( ) \_\_\_\_\_ Fax: ( ) \_\_\_\_\_

**SECTION 3: General Description of the Waste**

Name of Waste: RCRA empty containers

**Detailed Description of the Process Generating Waste:**

empty totes and drums

Physical State: ☐ Liquid ☐ Sludge ☐ Powder  
☒ Solid ☐ Filter Cake ☐ Combination

Color: na Odor: na

Specific Gravity (Water=1): na Density: na lbs / gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834	2835	2836	2841	2842	2843	2844	2851
2861	2865	2869	2873	2874	2876	2879	2891	2892	2893	2896	2899	2911	3312	4953	4959	9511

Layers: ☐ Single-Phase ☐ Multi-Phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☒ Other (explain) Drum

Container Size: varies

Number Of Units: \_\_\_\_\_

Is this a USEPA "Hazardous Waste" per 40 CFR 261.37 ☐ Yes ☒ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 ☐ D002 ☐ D003

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007  
☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristics for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☒ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code No :

Proper U.S. State Waste Code No : Non-RCRA/Non-DOT Regulated Material (empty containers)

Class : UN/NA : PG : RQ :

Flash Point	pH	Reactive Sulfides mg/l	Reactive Cyanides mg/l	Solids 100 %
Oil and Grease mg/l	TOC mg/l	Zinc mg/l	Copper mg/l	Nickel mg/l

#### SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	Concentration	Units
The material / product consists of the following materials	Ranges are acceptable	or %
empty containers	100	%

#### SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Ad

#### SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.

none

#### SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

none

#### SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generators knowledge

TCLP Metals : ☒  
TCLP Volatiles : ☒  
TCLP Semi-Volatiles : ☒  
Reactivity : ☒

Corrosivity :                      X    
Ignitability :                      X  

**SECTION 9: Waste Receipt Classification Under 40 CFR 437**

Is this material a wastewater or wastewater sludge ?      ☐ YES      ☒ NO

If 'YES', complete this section

**PLEASE CHECK THE APPROPRIATE BOX: IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE**

**Metals Subcategory:    *Subpart A***

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory:    *Subpart B***

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation wastes
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory:    *Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesive and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations

☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcategory

☐ Oils Subcategory

☐ Organics Subcategory

#### **SECTION 10: Additional Instruction**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

#### **SECTION 11: Generator's Certification**

The information contained herein is based on ☐ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature :       WA      

Date :       7-8-08      

Printed Name / Title :       /      

**CES USE ONLY (DO NOT WRITE IN THIS SPACE)**

**Process Facility Information :**

Compliance Officer :       Robert Thompson      

Date :       7-8-08       Status :       Approved       Rejected

Approval Number :       2872



PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

\$ 10/ drum

2. Contamination Limit (maximum limit before surcharges apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A    ☐ Subcategory B    ☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**7. Tests for Product Recovered/Recycled (if applicable):**

--

**8. Management for Product Recovered/Recycled (if applicable)**

--

2873

Texas Terminals, L.P.



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/8/2008

Dear Mary Banks

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2873

**Expiration Date** 7/8/2010

**Generator:** Texas Terminals, L.P.  
**Address:** 15902 Peninsula Blvd.  
Houston, TX 77015

### Waste Information

**Name of Waste:** Clayseal plus

**TCEQ Waste Code #:** CESQ2071

**Container Type:**

**Detailed Description of Process Generating Waste:**

Unused product

**Color:** clear to light yellow

**Odor:** amine

**pH:** 6-8

**Physical State:**

**Incompatibilities:** oxidizers

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

JUN-26-2008 09:56

CES ENVIROMENTAL

7137408664 P.002

ERP

System 1 processing



4904 Griggs Road, Houston, TX 77021  
 Phone: (713) 676-1460 Fax: (713) 676-1676

<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950451 ISWR Number: 30900

**SECTION 1: Generator Information**

Company: Texas Terminals  
 Address: 15902 Peninsula Blvd  
 City: Houston State: TX Zip: 77015  
 Contact: Eduardo Ponce Title:  
 Phone Number: 281.457.3131 Fax Number: 281.457.3232  
 24/hr Phone Number: 281.457.3131  
 US EPA ID No: TXCESQ6  
 State ID No: CESQ6 SIC Code:

**SECTION 2: Billing Information:** ☒ Same as Above

Company:  
 Address:  
 City: State: Zip:  
 Contact: Title:  
 Phone Number: Fax Number:

**SECTION 3: General Description of the Waste**

Name of Waste: Clayseal Plus  
 Detailed Description of Process Generating Waste:

Unused product

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: Clear Light Yellow Odor: Amine

Specific Gravity (water=1): 1.07 Density: 8.4 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☐ Yearly ☒ One-Time

Quantity: 1

☐ Yes ☒ No

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)  
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009  
☐ D010 ☐ D011

☐ Yes ☒ No☐ Yes ☒ No

**CESQ2071**

Non RCRA Non DOT regulated Material

#### **SECTION 4: Physical and Chemical Data**

EPAHQ106001226

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.  
standard

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

Oxidizers

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals:	x
TCLP Volatiles:	x
TCLP Semi-Volatiles:	x
Reactivity:	f
Corrosivity:	f
Ignitability:	f

**SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)**

Is this material a wastewater or wastewater sludge?

☐ YES ☒ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory: Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

- (1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.
- (2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.
- Cadmium: 0.2 mg/L
  - Chromium: 8.9 mg/L
  - Copper: 4.9 mg/L
  - Nickel: 37.5 mg/L
- (3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.
- ☐ Metals Subcategory
  - ☐ Oils Subcategory
  - ☐ Organics Subcategory

SECTION 10: Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☒ generator knowledge and/or ☒ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature:

*Edward C. Ponce*

Date:

6/26/08

Printed Name/Title:

EDUARDO C. PONCE - SAFETY COORDINATOR

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer:

*Leah Chang*

Date:

7-8-08

☒ Approved

☐ Rejected

Approval Number:

2873



CES Environmental  
Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

100<sup>00</sup>/DM  
250<sup>00</sup> TRANS + FSC

2. Contamination Limit (maximum limit before surcharges apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

Flash point, pH - Process to System 1

5. Treatment and Handling Protocol:

Class 1 liquids - Process to system 1

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A    ☐ Subcategory B    ☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**7. Tests for Product Recovered/Recycled (if applicable):**

--

**8. Management for Product Recovered/Recycled (if applicable)**

--

2874

Montgomery County Household Facility



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/9/2008

Dear Zac or Dave

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2874

**Expiration Date** 7/9/2010

**Generator:** Montgomery County Household Facility

**Address:** 1130 Pruitt Road  
Spring, TX 77380

### Waste Information

**Name of Waste:** Paint waste

**TCEQ Waste Code #:** CESQ1011

**Container Type:**

**Detailed Description of Process Generating Waste:**

Latex paint washwater

**Color:** varies

**Odor:** slight

**pH:** neutral

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**

none

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

GRP  
Profile tag. Sections not checked yes or No.  
Incomplete



4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

**SECTION 1: Generator Information**

Company: MONTGOMERY COUNTY PRECINCT 3

Address: 1122 PRUITT ROAD

City: SPRING State: TX Zip: 77380

Contact: BECKY COTTINGHAM Title: COORDINATOR

Phone Number: 281-367-7283 Fax Number: 281-298-7321

24/hr Phone Number: 281-541-4829

US EPA ID No: TXCESQG

State ID No: CESQG SIC Code:

**SECTION 2: Billing Information -** ☐ Same as Above

Company: CKG SERVICES

Address: 10707 HONEA EGYPT ROAD

City: MONTGOMERY State: TX Zip: 77316

Contact: ZAC MCKAUGHAN Title: PRESIDENT

Phone Number: 936-483-3662 Fax Number: 936-756-1226

**SECTION 3: General Description of the Waste**

Name of Waste: PAINT WASTE WATER

Detailed Description of Process Generating Waste: LATEX PAINT WASH WATER

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: NA varies Odor: NA slight

Specific Gravity (water=1): NA 1 Density: NA 8.34 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☒ Monthly ☐ Yearly ☐ One-Time

Quantity: NA 1



**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

NONE

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. ANALYTICAL

**SECTION 7: Incompatibilities**

Please list ALL Incompatibilities (if any):

None Known

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	0
TCLP Volatiles:	0
TCLP Semi-Volatiles:	0
Reactivity:	0
Corrosivity:	0
Ignitability:	0

**SECTION 9: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature:

Date:

7/3/08

Printed Name/Title:

ZAC MCKAUGHAN / PRESIDENT

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer:

Date: 7-9-08

☒ Approved

☐ Rejected

Approval Number:

2874



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**1. Base Pricing (including freight):**

\$65/drum

**2. Contamination Limit (maximum limit before surcharges apply):**

**3. Surcharge Pricing:**

**4. Special Testing Requirements:**

forward to Newpark

**5. Treatment and Handling Protocol:**

DO NOT treat in waste water treatment, forward to Newpark

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A    ☐ Subcategory B    ☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**7. Tests for Product Recovered/Recycled (if applicable):**

--

**8. Management for Product Recovered/Recycled (if applicable)**

--



1544 Sawdust Road, Suite 505  
The Woodlands, TX 77380  
(281) 292-5277  
FAX: (281) 292-2481

June 27, 2008

ZAC MCKAUGHAN  
CKG SERVICES  
10707 HONEA EGYPT RD.  
MONTGOMERY, TX 77316

REFERENCE:

Project.....: MONTGOMERY CTY PAINT WAS  
Project Number.....:  
Lab Episode Number.....: 9162  
Date Received.....: 06/12/2008

Dear ZAC MCKAUGHAN:

Enclosed is the analytical Report for the project referenced above. The following sample(s) are included in the report.

☒ 0001



All the holding times were met for the tests performed on these samples. Enclosed, please find the Quality Control Summary. All quality control results for the QC batch that are applicable to the sample(s) are acceptable except as noted in the QC batch reports.

If the report is acceptable, please approve the enclosed invoice and forward it for payment.

Thank you for selecting A4 SCIENTIFIC for your laboratory needs on this project. If you have any questions concerning these results, please feel free to contact me at any time.

We look forward to working with you on future projects.

Sincerely,

Christy Westell  
Accounts Manager



www.a4scientific.com

1544 Sawdust Road, Suite 505  
The Woodlands, TX 77380  
(281) 292-5277  
(Fax): (281) 292-2481

## ANALYTICAL REPORT

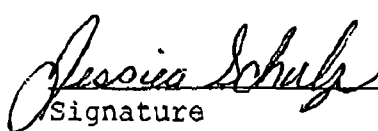
CLIENT PROJECT.....: MONTGOMERY CTY PAINT WASH  
CLIENT PROJECT NUMBER....: \_\_\_\_\_

**Prepared For:**

CKG SERVICES  
10707 HONEA EGYPT RD.  
MONTGOMERY, TX 77316

ATTENTION: ZAC MCKAUGHAN

Date: 06/27/2008

  
Signature

for  
Reddy  
Pakanati

LAB EPISODE NUMBER: 9162

Date Received.....: 06/12/2008

Lab Project ID.....: MONTGOMERY CTY

Reddy Pakanati

Laboratory Manager

(281) 292-5277

pakanati@a4scientific.com



# **SAMPLE LOG-IN CHECKLIST/DISCREPANCY REPORT**

EPISODE #: <u>91102</u> DATE/REC'D: <u>6/11/08</u> CLIENT NAME: <u>CX 3 Services</u> PROJECT NAME: <u>Metformin PCT3</u> PROJECT NUMBER: <u>120003</u> # <u>1</u> AQUEOUS, # <u>0</u> SOIL SAMPLES COURIER/AIRBILL # <u>Nank Carry</u>	TEMP & ID: 1) <u>UA</u> # <u>taken within 1 hour</u> 2) _____ # _____ 3) _____ # _____ 4) _____ # _____ 5) _____ # _____ 6) _____ # _____																																																
SAMPLE CONTAINER SEALS: present <input checked="" type="radio"/> absent <input type="radio"/> intact <input type="radio"/> broken COOLER CUSTODY SEALS: present <input checked="" type="radio"/> absent <input type="radio"/> intact <input type="radio"/> broken NAME & DATE: _____ HOW MANY AND WHERE _____																																																	
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:70%;">Were samples screened for radioactivity?</th> <th style="width:15%;">YES</th> <th style="width:15%;">NO</th> </tr> </thead> <tbody> <tr> <td>Chain-of-custody present?</td> <td align="center"><input checked="" type="checkbox"/></td> <td align="center"><input checked="" type="checkbox"/></td> </tr> <tr> <td>Custody documents: Sealed in a plastic bag?</td> <td align="center"><input checked="" type="checkbox"/></td> <td align="center"><input checked="" type="checkbox"/></td> </tr> <tr> <td>Signed and dated by field personnel</td> <td align="center"><input checked="" type="checkbox"/></td> <td align="center"><input checked="" type="checkbox"/></td> </tr> <tr> <td>Filled out properly in indelible ink?</td> <td align="center"><input checked="" type="checkbox"/></td> <td align="center"><input checked="" type="checkbox"/></td> </tr> <tr> <td>Signed and dated by log-in personnel?</td> <td align="center"><input checked="" type="checkbox"/></td> <td align="center"><input checked="" type="checkbox"/></td> </tr> <tr> <td>Container Condition: Each containers sealed in a separate plastic bag?</td> <td align="center"><input checked="" type="checkbox"/></td> <td align="center"><input checked="" type="checkbox"/></td> </tr> <tr> <td>Labels complete (ID, date, time, signature, preservative, etc.)?</td> <td align="center"><input checked="" type="checkbox"/></td> <td align="center"><input checked="" type="checkbox"/></td> </tr> <tr> <td>Labels agree with chain-of-custody?</td> <td align="center"><input checked="" type="checkbox"/></td> <td align="center"><input checked="" type="checkbox"/></td> </tr> <tr> <td>Received without leakage or breakage? If no, list:</td> <td align="center"><input checked="" type="checkbox"/></td> <td align="center"><input checked="" type="checkbox"/></td> </tr> <tr> <td>Correct quantity indicated on chain-of-custody?</td> <td align="center"><input checked="" type="checkbox"/></td> <td align="center"><input checked="" type="checkbox"/></td> </tr> <tr> <td>Sample Integrity: Correct containers used for the test indicated? If no, list:</td> <td align="center"><input checked="" type="checkbox"/></td> <td align="center"><input checked="" type="checkbox"/></td> </tr> <tr> <td>Correct preservatives added to the samples? If no, list:</td> <td align="center"><input checked="" type="checkbox"/></td> <td align="center"><input checked="" type="checkbox"/></td> </tr> <tr> <td>Sufficient sample amount sent for the tests indicated? If no, list:</td> <td align="center"><input checked="" type="checkbox"/></td> <td align="center"><input checked="" type="checkbox"/></td> </tr> <tr> <td>VOA vials filled completely? If no, list:</td> <td align="center"><input checked="" type="checkbox"/></td> <td align="center"><input checked="" type="checkbox"/></td> </tr> <tr> <td>Aqueous volatiles samples preserved? If no, list:</td> <td align="center"><input checked="" type="checkbox"/></td> <td align="center"><input checked="" type="checkbox"/></td> </tr> </tbody> </table>		Were samples screened for radioactivity?	YES	NO	Chain-of-custody present?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Custody documents: Sealed in a plastic bag?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Signed and dated by field personnel	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Filled out properly in indelible ink?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Signed and dated by log-in personnel?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Container Condition: Each containers sealed in a separate plastic bag?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Labels complete (ID, date, time, signature, preservative, etc.)?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Labels agree with chain-of-custody?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Received without leakage or breakage? If no, list:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Correct quantity indicated on chain-of-custody?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Sample Integrity: Correct containers used for the test indicated? If no, list:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Correct preservatives added to the samples? If no, list:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Sufficient sample amount sent for the tests indicated? If no, list:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	VOA vials filled completely? If no, list:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Aqueous volatiles samples preserved? If no, list:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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Discrepancy Report: Discrepancies to be discussed with the client? <u>Discussed proper sample containers with client.</u> Project Manager's recommendations? _____ Who was notified? <u>Sam McLaughlin</u> By whom? <u>CEW</u> Date: _____ Client's comments: _____ Corrective actions carried out? _____																																																	

COMMENTS:

For those short holding time and fast turn-around parameters, has a Rush Notification sheet been issued to the lab?		
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LOG-IN BY: CEW

DATE: 6/11/08

**A4 Scientific, Inc.**  
 1544 Sawdust Road, Suite 505  
 The Woodlands, TX 77380

EPAHO106001241



# Sample Log-In Report

1544 Sawdust Road, Suite 505  
The Woodlands, TX 77380

Logged By:  
Client Name: CKG SERVICES  
Client Project Name: MONTGOMERY CTY PAINT WASH  
Client Project #:  
P.O. No.:  
Carrier/No.:

Lab Project ID: MONTGOMERY CTY PAINT WASH  
Date Logged: 06/12/08  
Date Received: 06/12/08  
Time Received: 10:42

Report Date: 07/02/2008 14:22:25  
Send Report To:  
ZAC MCKAUGHRAN  
10707 HOWEA EGYPT RD.

MONTGOMERY  
TX 77316

CASE	SD#	Lab Sample ID	Client Sample ID	No. Sample	Date	Time	Chain Of	Conf. Matrix	Sampled	Sampled	Custody No.	Tests Required	Date	Remarks
		9162.001	0001	1	LIQUID	06/11/08	13:00	9162						
												MET_TOTAL_ECRAMETALS+Be+Ni+Sb	06/17/08	PAINT WASH
												VOA8260B-LOW+TIC-TRRP	06/17/08	

## Instructions To Lab:

WASTE SAMPLE - NO % MOISTURE

\*\*\* SEMI-VOLATILES NOT RUN DO TO THE MATRIX OF THE SAMPLE \*\*\*

Lab Approval

Client Approval

# **VOLATILES**



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The Woodlands, TX 77380

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# LABORATORY REPORT

## VOLATILES BY GC/MS

CLIENT NAME	: CKG SERVICES	CLIENT SAMPLE ID	: 0001
PROJECT NAME	: MONTGOMERY CTY PAINT WASH	LAB SAMPLE ID	: 9162.001
PROJECT NUMBER	:	METHOD REFERENCE	: SW846-8260B
DATE SAMPLED	: 06/11/2008	DATE RECEIVED	: 06/12/2008
SAMPLE MATRIX	: LIQUID	PRINTED ON	: 07/01/2008 18:06

ANALYST	: MM	DATE ANALYZED	: 06/24/08
DILUTION	: 50	INSTRUMENT FILE	: H3095
INSTRUMENT ID	: H-5976	PURGE VOLUME	: 25 mL
TIME ANALYZED	: 17:47		

PARAMETER	QUANTITATION LIMIT		RESULTS		QUALIFIER
1,1,1,2-Tetrachloroethane	50	UG/L	ND	UG/L	
1,1,1-Trichloroethane	50	UG/L	ND	UG/L	
1,1,2,2-Tetrachloroethane	50	UG/L	ND	UG/L	
1,1,2-Trichloroethane	50	UG/L	ND	UG/L	
1,1-Dichloroethane	50	UG/L	ND	UG/L	
1,1-Dichloroethene	50	UG/L	ND	UG/L	
1,1-Dichloropropene	50	UG/L	ND	UG/L	
1,2,3-Trichlorobenzene	50	UG/L	ND	UG/L	
1,2,3-Trichloropropane	50	UG/L	61	UG/L	
1,2,4-Trichlorobenzene	50	UG/L	ND	UG/L	
1,2,4-Trimethylbenzene	50	UG/L	80	UG/L	
1,2-Dibromo-3-chloropropane	50	UG/L	ND	UG/L	
1,2-Dibromothane	50	UG/L	ND	UG/L	
1,2-Dichlorobenzene	50	UG/L	ND	UG/L	
1,2-Dichloroethane	50	UG/L	ND	UG/L	
1,2-Dichloropropane	50	UG/L	ND	UG/L	
1,3,5-Trimethylbenzene	50	UG/L	ND	UG/L	
1,3-Dichlorobenzene	50	UG/L	ND	UG/L	
1,3-Dichloropropane	50	UG/L	120	UG/L	
1,4-Dichlorobenzene	50	UG/L	ND	UG/L	
1-Chlorohexane	50	UG/L	ND	UG/L	
2,2-Dichloropropane	50	UG/L	ND	UG/L	
2-Butanone	250	UG/L	ND	UG/L	
2-Chlorotoluene	50	UG/L	ND	UG/L	
2-Hexanone	250	UG/L	ND	UG/L	
4-Chlorotoluene	50	UG/L	ND	UG/L	
4-Methyl-2-pentanone	250	UG/L	ND	UG/L	
Acetone	250	UG/L	ND	UG/L	
Benzene	50	UG/L	ND	UG/L	
Bromobenzene	50	UG/L	ND	UG/L	
Bromochloromethane	50	UG/L	ND	UG/L	
Bromodichloromethane	50	UG/L	ND	UG/L	
Bromoform	50	UG/L	ND	UG/L	
Bromomethane	50	UG/L	ND	UG/L	



1544 Sawdust Road, Suite 505  
The Woodlands, TX 77380

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# LABORATORY REPORT

## VOLATILES BY GC/MS

CLIENT NAME	: CKG SERVICES	CLIENT SAMPLE ID	: 0001
PROJECT NAME	: MONTGOMERY CTY PAINT WASH	LAB SAMPLE ID	: 9162.001
PROJECT NUMBER	:	METHOD REFERENCE	: SW846-B260B
DATE SAMPLED	: 06/12/2008	DATE RECEIVED	: 06/12/2008
SAMPLE MATRIX	: LIQUID	PRINTED ON	: 07/01/2008 18:06

PARAMETER	QUANTITATION LIMIT	RESULTS	QUALIFIER
Carbon tetrachloride	50	UG/L ND	UG/L
Chlorobenzene	50	UG/L ND	UG/L
Chloroethane	50	UG/L ND	UG/L
Chloroform	50	UG/L ND	UG/L
Chloromethane	50	UG/L ND	UG/L
cis-1,2-Dichloroethene	50	UG/L ND	UG/L
cis-1,3-Dichloropropene	50	UG/L ND	UG/L
Dibromochloromethane	30	UG/L ND	UG/L
Dibromomethane	50	UG/L ND	UG/L
Dichlorodifluoromethane	50	UG/L ND	UG/L
Ethylbenzene	50	UG/L 70	UG/L
Hexachlorobutadiene	50	UG/L ND	UG/L
Isopropylbenzene	50	UG/L ND	UG/L
Methyl tert-butyl ether	50	UG/L ND	UG/L
Methylene chloride	50	UG/L ND	UG/L
n-Butylbenzene	50	UG/L ND	UG/L
n-Propylbenzene	50	UG/L ND	UG/L
Naphthalene	50	UG/L ND	UG/L
p-Isopropyltoluene	50	UG/L ND	UG/L
sec-Butylbenzene	50	UG/L ND	UG/L
Styrene	50	UG/L ND	UG/L
tert-Butylbenzene	50	UG/L ND	UG/L
Tetrachloroethene	50	UG/L ND	UG/L
Toluene	50	UG/L ND	UG/L
trans-1,2-Dichloroethene	50	UG/L ND	UG/L
trans-1,3-Dichloropropene	50	UG/L ND	UG/L
Trichloroethene	50	UG/L ND	UG/L
Trichlorofluoromethane	50	UG/L ND	UG/L
Vinyl chloride	50	UG/L ND	UG/L
Xylene (total)	50	UG/L 370	UG/L

QUALITY CONTROL DATA			
SURROGATE COMPOUND	SPike ADDED	QC RECOVERY LIMITS	%RECOVERY
4-Bromofluorobenzene	500 UG/L	75 - 125	94
Dibromofluoromethane	500 UG/L	75 - 131	93



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The Woodlands, TX 77380

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#### LABORATORY REPORT

#### VOLATILES BY GC/MS

CLIENT NAME	: CKG SERVICES	CLIENT SAMPLE ID	: 0001
PROJECT NAME	: MONTGOMERY CTY PAINT NASH	LAB SAMPLE ID	: 9162.001
PROJECT NUMBER	:	METHOD REFERENCE	: SW846-8260B
DATE SAMPLED	: 06/11/2008	DATE RECEIVED	: 06/12/2008
SAMPLE MATRIX	: LIQUID	PRINTED ON	: 07/01/2008 18:06

#### QUALITY CONTROL DATA

Toluene-d8	500 UG/L	68 - 125	101
1,2-Dichloroethane-d4	500 UG/L	62 - 139	86

# METALS



The Woodlands, TX 77380  
1544 Sawdust Road, Suite 505

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LABORATORY REPORT

TOTAL METALS

CLIENT NAME : CKG SERVICES CLIENT SAMPLE ID : 0001  
PROJECT NAME : MONTGOMERY CTY PAINT WASH LAB SAMPLE ID : 9162.001  
PROJECT NUMBER : DATE RECEIVED : 06/12/2008  
DATE SAMPLED : 06/11/2008 PRINTED ON : 07/01/2008 18:16  
SAMPLE MATRIX : LIQUID % MOISTURE :

ANALYTE	METHOD	DATE PREPARED	DATE ANALYZED	DILU- TION	QUANTITATION LIMIT	RESULT	Q	ANA- LYST
Antimony, Total	SW846-6010B	06/18/08	06/23/08	5	0.025 MG/L	0.0685 MG/L		MP
Arsenic, Total	SW846-6010B	06/18/08	06/23/08	5	0.025 MG/L	ND MG/L		MP
Barium, Total	SW846-6010B	06/18/08	06/23/08	5	0.05 MG/L	0.605 MG/L		MP
Beryllium, Total	SW846-6010B	06/18/08	06/23/08	5	0.025 MG/L	ND MG/L		MP
Cadmium, Total	SW846-6010B	06/18/08	06/23/08	5	0.005 MG/L	ND MG/L		MP
Chromium, Total	SW846-6010B	06/18/08	06/23/08	5	0.05 MG/L	ND MG/L		MP
Lead, Total	SW846-6010B	06/18/08	06/23/08	5	0.015 MG/L	ND MG/L		MP
Mercury, Total	SW846-7470A	06/20/08	06/20/08	10	0.0025 MG/L	ND MG/L		SD
Nickel, Total	SW846-6010B	06/18/08	06/23/08	5	0.05 MG/L	ND MG/L		MP
Selenium, Total	SW846-6010B	06/18/08	06/23/08	5	0.025 MG/L	ND MG/L		MP
Silver, Total	SW846-6010B	06/18/08	06/23/08	5	0.025 MG/L	ND MG/L		MP

# **QUALITY CONTROL DATA**



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The Woodlands, TX 77380

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LABORATORY REPORT

VOLATILES BY GC/MS

CLIENT NAME : CLIENT SAMPLE ID : Prep Blank  
PROJECT NAME : LAB SAMPLE ID : HVELKMT  
PROJECT NUMBER : METHOD REFERENCE : SW846-8260B  
DATE SAMPLED : DATE RECEIVED :  
SAMPLE MATRIX : LIQUID PRINTED ON : 06/26/2008 14:22

ANALYST : MM DATE ANALYZED : 06/24/08  
DILUTION : 1 INSTRUMENT FILE : B3089  
INSTRUMENT ID : H-5975 PURGE VOLUME : 25 mL  
TIME ANALYZED : 14:19

PARAMETER	QUANTITATION LIMIT		RESULTS		QUALIFIER
1,1,1,2-Tetrachloroethane	1.0	UG/L	ND	UG/L	
1,1,1-Trichloroethane	1.0	UG/L	ND	UG/L	
1,1,2,2-Tetrachloroethane	1.0	UG/L	ND	UG/L	
1,1,2-Trichloroethane	1.0	UG/L	ND	UG/L	
1,1-Dichloroethane	1.0	UG/L	ND	UG/L	
1,1-Dichloroethene	1.0	UG/L	ND	UG/L	
1,1-Dichloropropene	1.0	UG/L	ND	UG/L	
1,2,3-Trichlorobenzene	1.0	UG/L	ND	UG/L	
1,2,3-Trichloropropane	1.0	UG/L	ND	UG/L	
1,2,4-Trichlorobenzene	1.0	UG/L	ND	UG/L	
1,2,4-Trimethylbenzene	1.0	UG/L	ND	UG/L	
1,2-Dibromo-3-chloropropane	1.0	UG/L	ND	UG/L	
1,2-Dibromoethane	1.0	UG/L	ND	UG/L	
1,2-Dichlorobenzene	1.0	UG/L	ND	UG/L	
1,2-Dichloroethane	1.0	UG/L	ND	UG/L	
1,2-Dichloropropane	1.0	UG/L	ND	UG/L	
1,3,5-Trimethylbenzene	1.0	UG/L	ND	UG/L	
1,3-Dichlorobenzene	1.0	UG/L	ND	UG/L	
1,3-Dichloropropane	1.0	UG/L	ND	UG/L	
1,4-Dichlorobenzene	1.0	UG/L	ND	UG/L	
1-Chlorohexane	1.0	UG/L	ND	UG/L	
2,2-Dichloropropane	1.0	UG/L	ND	UG/L	
2-Butanone	5.0	UG/L	ND	UG/L	
2-Chlorotoluene	1.0	UG/L	ND	UG/L	
2-Hexanone	5.0	UG/L	ND	UG/L	
4-Chlorotoluene	1.0	UG/L	ND	UG/L	
4-Methyl-2-pentanone	5.0	UG/L	ND	UG/L	
Acetone	5.0	UG/L	ND	UG/L	
Benzene	1.0	UG/L	ND	UG/L	
Bromobenzene	1.0	UG/L	ND	UG/L	
Bromochloromethane	1.0	UG/L	ND	UG/L	
Bromodichloromethane	1.0	UG/L	ND	UG/L	
Bromoform	1.0	UG/L	ND	UG/L	
Bromomethane	1.0	UG/L	ND	UG/L	



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The Woodlands, TX 77380

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LABORATORY REPORT

VOLATILES BY GC/MS

CLIENT NAME :	CLIENT SAMPLE ID : Prep Blank
PROJECT NAME :	LAB SAMPLE ID : HVBLKMT
PROJECT NUMBER :	METHOD REFERENCE : SW846-8260B
DATE SAMPLED :	DATE RECEIVED :
SAMPLE MATRIX : LIQUID	PRINTED ON : 06/26/2008 14:22

PARAMETER	QUANTITATION LIMIT	RESULTS	QUALIFIER
Carbon tetrachloride	1.0	UG/L	ND
Chlorobenzene	1.0	UG/L	ND
Chloroethane	1.0	UG/L	ND
Chloroform	1.0	UG/L	ND
Chloromethane	1.0	UG/L	ND
cis-1,2-Dichloroethane	1.0	UG/L	ND
cis-1,3-Dichloropropene	1.0	UG/L	ND
Dibromochloromethane	1.0	UG/L	ND
Dibromomethane	1.0	UG/L	ND
Dichlorodifluoromethane	1.0	UG/L	ND
Ethylbenzene	1.0	UG/L	ND
Hexachlorobutadiene	1.0	UG/L	ND
Isopropylbenzene	1.0	UG/L	ND
Methyl tert-butyl ether	1.0	UG/L	ND
Methylene chloride	1.0	UG/L	ND
n-Butylbenzene	1.0	UG/L	ND
n-Propylbenzene	1.0	UG/L	ND
Naphthalene	1.0	UG/L	ND
p-Isopropyltoluene	1.0	UG/L	ND
sec-Butylbenzene	1.0	UG/L	ND
Styrene	1.0	UG/L	ND
tert-Butylbenzene	1.0	UG/L	ND
Tetrachloroethene	1.0	UG/L	ND
Toluene	1.0	UG/L	ND
trans-1,2-Dichloroethene	1.0	UG/L	ND
trans-1,3-Dichloropropene	1.0	UG/L	ND
Trichloroethene	1.0	UG/L	ND
Trichlorofluoromethane	1.0	UG/L	ND
Vinyl chloride	1.0	UG/L	ND
Xylene (total)	1.0	UG/L	ND

QUALITY CONTROL DATA

SURROGATE COMPOUND	SPIKE ADDED	QC RECOVERY LIMITS	%RECOVERY
4-Bromofluorobenzene	10 UG/L	75 - 125	95
Dibromofluoromethane	10 UG/L	75 - 131	99



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The Woodlands, TX 77380

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LABORATORY REPORT

VOLATILES BY GC/MS

CLIENT NAME	:	CLIENT SAMPLE ID	: Prep Blank
PROJECT NAME	:	LAB SAMPLE ID	: HVBLKMT
PROJECT NUMBER	:	METHOD REFERENCE	: SW846-8260B
DATE SAMPLED	:	DATE RECEIVED	:
SAMPLE MATRIX	: LIQUID	PRINTED ON	: 06/26/2008 14:22

QUALITY CONTROL DATA

Toluene-d8	10 UG/L	58 - 125	104
1,2-Dichloroethane-d4	10 UG/L	62 - 139	90



1544 Sawdust Road, Suite 505  
The Woodlands, TX 77380

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# LCS/LCSD SUMMARY REPORT

## VOLATILES BY GC/MS

CLIENT NAME :  
PROJECT NAME :  
PROJECT NUMBER :

DATE RECEIVED :  
PRINTED ON : 06/26/2008 14:22

SAMPLE MATRIX : LIQUID

METHOD REFERENCE : SW846-8260B

LAB CONTROL SAMPLE

LAB CONTROL SAMPLE DUPLICATE

LCS SAMPLE ID : HVLCSMT

LCSD SAMPLE ID :

CLIENT SAMPLE ID :

CLIENT SAMPLE ID :

DATE ANALYZED : 06/24/08

DATE ANALYZED :

INSTRUMENT FILE : H3090

INSTRUMENT FILE :

PARAMETER	UNITS	LCB TRUE VALUE	LCSD TRUE VALUE	LCS FOUND VALUE	LCSD FOUND VALUE	LCS RECOVERY (%)	LCSD RECOVERY (%)	RPD	QC LIMITS LIMIT REC.
1,1,1,2-Tetrachloroethane	UG/L	10.0		10.9		109			20 70 - 130
1,1,1-Trichloroethane	UG/L	10.0		11.0		110			20 67 - 132
1,1,2,2-Tetrachloroethane	UG/L	10.0		10.0		100			20 63 - 128
1,1,2-Trichloroethane	UG/L	10.0		11.0		110			20 70 - 130
1,1-Dichloroethane	UG/L	10.0		11.0		110			20 69 - 133
1,1-Dichloroethane	UG/L	10.0		11.3		113			20 68 - 130
1,1-Dichloropropene	UG/L	10.0		11.1		111			20 70 - 130
1,2,3-Trichlorobenzene	UG/L	10.0		10.6		106			20 67 - 137
1,2,3-Trichloropropane	UG/L	10.0		8.47		85			20 70 - 130
1,2,4-Trichlorobenzene	UG/L	10.0		10.8		108			20 66 - 134
1,2,4-Trimethylbenzene	UG/L	10.0		11.7		117			20 70 - 136
1,2-Dibromo-3-chloropropane	UG/L	10.0		9.69		97			20 50 - 132
1,2-Dibromoethane	UG/L	10.0		10.8		108			20 70 - 130
1,2-Dichlorobenzene	UG/L	10.0		11.0		110			20 70 - 130
1,2-Dichloroethane	UG/L	10.0		10.8		108			20 69 - 132
1,2-Dichloropropane	UG/L	10.0		10.8		108			20 70 - 130
1,3,5-Trimethylbenzene	UG/L	10.0		11.5		115			20 70 - 130
1,3-Dichlorobenzene	UG/L	10.0		11.0		110			20 70 - 130
1,3-Dichloropropane	UG/L	10.0		11.7		117			20 70 - 130
1,4-Dichlorobenzene	UG/L	10.0		11.2		112			20 70 - 130
1-Chlorohexane	UG/L	10.0		11.0		110			20 70 - 130
2,2-Dichloropropane	UG/L	10.0		11.0		110			20 69 - 137
2-Butanone	UG/L	50.0		51.7		103			20 49 - 136
2-Chlorotoluene	UG/L	10.0		11.0		110			20 70 - 130
2-Hexanone	UG/L	50.0		50.4		101			20 61 - 145
4-Chlorotoluene	UG/L	10.0		11.0		110			20 70 - 130
4-Methyl-2-pentanone	UG/L	50.0		51.4		103			20 61 - 145
Acetone	UG/L	50.0		51.2		102			20 40 - 135
Benzene	UG/L	10.0		11.2		112			20 70 - 130
Bromobenzene	UG/L	10.0		10.6		106			20 70 - 130
Bromochloromethane	UG/L	10.0		11.3		113			20 65 - 129
Bromodichloromethane	UG/L	10.0		11.1		111			20 61 - 145
Bromoform	UG/L	10.0		10.2		102			20 61 - 145
Bromomethane	UG/L	10.0		13.3		133			20 61 - 145



1544 Sawdust Road, Suite 505  
The Woodlands, TX 77380

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LCS/LCSD SUMMARY REPORT

VOLATILES BY GC/MS

CLIENT NAME :  
PROJECT NAME :  
PROJECT NUMBER :

DATE RECEIVED :  
PRINTED ON : 06/26/2006 14:22

SAMPLE MATRIX : LIQUID

METHOD REFERENCE : SW846-8260B

LAB CONTROL SAMPLE

LAB CONTROL SAMPLE DUPLICATE

LCS SAMPLE ID : HVLCSMT

LCSD SAMPLE ID :

CLIENT SAMPLE ID :

CLIENT SAMPLE ID :

DATE ANALYZED : 06/24/06

DATE ANALYZED :

INSTRUMENT FILE : H3090

INSTRUMENT FILE :

PARAMETER	UNITS	LCS TRUE VALUE	LCSD TRUE VALUE	LCS FOUND VALUE	LCSD FOUND VALUE	LCS RECOVERY (%)	LCSD RECOVERY (%)	RPD QC LIMITS		
								RPD	LIMIT	REC
Carbon tetrachloride	UG/L	10.0		11.2		112			20	61 - 145
Chlorobenzene	UG/L	10.0		11.3		113			20	66 - 130
Chloroethane	UG/L	10.0		13.6		136			20	58 - 133
Chloroform	UG/L	10.0		11.3		113			20	69 - 128
Chloromethane	UG/L	10.0		11.4		114			20	56 - 131
cis-1,2-Dichloroethene	UG/L	10.0		11.4		114			20	70 - 130
cis-1,3-Dichloropropene	UG/L	10.0		10.9		109			20	69 - 131
Dibromochloromethane	UG/L	10.0		11.0		110			20	66 - 133
Dibromomethane	UG/L	10.0		10.9		109			20	70 - 130
Dichlorodifluoromethane	UG/L	10.0		11.5		115			20	53 - 153
Ethylbenzene	UG/L	10.0		11.6		116			20	70 - 130
Hexachlorobutadiene	UG/L	10.0		11.8		118			20	67 - 131
Isopropylbenzene	UG/L	10.0		11.6		116			20	70 - 130
Methyl tert-butyl ether	UG/L	10.0		10.3		103			20	69 - 123
Methylene chloride	UG/L	10.0		9.55		96			20	63 - 137
n-Butylbenzene	UG/L	10.0		12.0		120			20	69 - 137
n-Propylbenzene	UG/L	10.0		11.6		116			20	70 - 130
Naphthalene	UG/L	10.0		9.50		95			20	54 - 138
p-Isopropyltoluene	UG/L	10.0		10.1		101			20	70 - 130
sec-Butylbenzene	UG/L	10.0		11.0		110			20	70 - 130
Styrene	UG/L	10.0		11.3		113			20	68 - 134
tert-Butylbenzene	UG/L	10.0		11.7		117			20	70 - 129
Tetrachloroethene	UG/L	10.0		11.3		113			20	66 - 126
Toluene	UG/L	10.0		11.5		115			20	70 - 130
trans-1,2-Dichloroethene	UG/L	10.0		11.2		112			20	63 - 137
trans-1,3-Dichloropropene	UG/L	10.0		10.8		108			20	59 - 135
Trichloroethene	UG/L	10.0		11.1		111			20	70 - 127
Trichlorofluoromethane	UG/L	10.0		12.6		126			20	57 - 129
Vinyl chloride	UG/L	10.0		11.7		117			20	50 - 134
Xylene (total)	UG/L	30.0		35.1		117			20	70 - 130

\* Indicate values outside of QC limits

RPD : 0 out of 0 outside limits

Spike Recovery : 1 out of 64 outside limits



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The Woodlands, TX 77380

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LCS/LCSD SUMMARY REPORT

VOLATILES BY GC/MS

CLIENT NAME :  
PROJECT NAME :  
PROJECT NUMBER :

DATE RECEIVED :  
PRINTED ON : 06/26/2008 14:22

SAMPLE MATRIX : LIQUID

METHOD REFERENCE : 5W816-82608

LAB CONTROL SAMPLE

LAB CONTROL SAMPLE DUPLICATE

LCS SAMPLE ID : HVLCSMT

LCSD SAMPLE ID :

CLIENT SAMPLE ID :

CLIENT SAMPLE ID :

DATE ANALYZED : 06/24/08

DATE ANALYZED :

INSTRUMENT FILE : W3090

INSTRUMENT FILE :

PARAMETER	UNITS	LCS	LCSD	LCS	LCSD	LCS	LCSD	RPD	QC LIMITS
		TRUE	TRUE	FOUND	FOUND	RECOVERY	RECOVERY		
		VALUE	VALUE	VALUE	VALUE	(%)	(%)	RPD	REC.



The Woodlands, TX 77380  
1544 Sawdust Road, Suite 505

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LABORATORY REPORT

TOTAL METALS

CLIENT NAME : CLIENT SAMPLE ID : Prep Blank  
PROJECT NAME : LAB SAMPLE ID : ICPBLKI4A  
PROJECT NUMBER : DATE RECEIVED :  
DATE SAMPLED : PRINTED ON : 06/25/2008 11:49  
SAMPLE MATRIX : LIQUID % MOISTURE :

ANALYTE	METHOD	DATE PREPARED	DATE ANALYZED	DILUTION	QUANTITATION LIMIT	RESULT	Q	ANALYST
Antimony, Total	SW846-6010B	06/18/08	06/23/08	1	0.005 MG/L	ND MG/L		MP
Arsenic, Total	SW846-6010B	06/18/08	06/23/08	1	0.005 MG/L	ND MG/L		MP
Barium, Total	SW846-6010B	06/18/08	06/23/08	1	0.01 MG/L	ND MG/L		MP
Beryllium, Total	SW846-6010B	06/18/08	06/23/08	1	0.005 MG/L	ND MG/L		MP
Cadmium, Total	SW846-6010B	06/18/08	06/23/08	1	0.001 MG/L	ND MG/L		MP
Chromium, Total	SW846-6010B	06/18/08	06/23/08	1	0.01 MG/L	ND MG/L		MP
Lead, Total	SW846-6010B	06/18/08	06/23/08	1	0.003 MG/L	ND MG/L		MP
Nickel, Total	SW846-6010B	06/18/08	06/23/08	1	0.01 MG/L	ND MG/L		MP
Selenium, Total	SW846-6010B	06/18/08	06/23/08	1	0.005 MG/L	ND MG/L		MP
Silver, Total	SW846-6010B	06/18/08	06/23/08	1	0.005 MG/L	ND MG/L		MP



The Woodlands, TX 77380  
1544 Sawdust Road, Suite 505

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LABORATORY REPORT

TOTAL METALS

CLIENT NAME : CLIENT SAMPLE ID : Prep Blank  
PROJECT NAME : LAB SAMPLE ID : HGBLK09  
PROJECT NUMBER : DATE RECEIVED :  
DATE SAMPLED : PRINTED ON : 06/25/2008 11:49  
SAMPLE MATRIX : LIQUID % MOISTURE :

ANALYTE	METHOD	DATE PREPARED	DATE ANALYZED	DILUTION	QUANTITATION LIMIT	RESULT	Q	ANALYST
Mercury, Total	SW846-7470A	06/20/08	06/20/08	1	0.0002 MG/L	ND MG/L		SP



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The Woodlands, TX 77380

LCS/LCSD SUMMARY REPORT

TOTAL METALS

CLIENT NAME : DATE RECEIVED :  
PROJECT NAME : PRINTED ON : 06/25/2008 11:49  
PROJECT NUMBER :

SAMPLE MATRIX : LIQUID

LAB CONTROL SAMPLE

LAB CONTROL SAMPLE DUPLICATE

LCS SAMPLE ID : HGLCS09

LCSD SAMPLE ID :

CLIENT SAMPLE ID :

CLIENT SAMPLE ID :

COMPOUND	METHOD	REFERENCE	UNITS	LCS	LCSD	LCS	LCSD	LCS	LCSD	RPD	QC LIMITS	
				TRUE	TRUE	FOUND	FOUND	RECOVERY	RECOVERY		LIMIT	REC
Mercury, Total	SW846-7470A	MG/L	0.0012		0.0014		117				30	90 - 120

\* Indicate values outside of QC limits

RPD : 0 out of 0 outside limits

Spike Recovery : 0 out of 1 outside limits



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LCS/LCSD SUMMARY REPORT

TOTAL METALS

CLIENT NAME :  
PROJECT NAME :  
PROJECT NUMBER :

DATE RECEIVED :  
PRINTED ON : 06/25/2008 11:49

SAMPLE MATRIX : LIQUID

LAB CONTROL SAMPLE

LAB CONTROL SAMPLE DUPLICATE

LCS SAMPLE ID : ICPLCSI4A

LCSD SAMPLE ID :

CLIENT SAMPLE ID :

CLIENT SAMPLE ID :

COMPOUND	METHOD	REFERENCE	UNITS	LCS	LCSD	LCS	LCSD	LCS	LCSD	RPD	QC LIMITS	
				TRUE	TRUE	FOUND	FOUND	RECOVERY	RECOVERY		LIMIT	REC
				VALUE	VALUE	VALUE	VALUE	(%)	(%)			
Antimony, Total	SW846-6010B	MG/L		1.250		1.190		95			20	80 - 120
Arsenic, Total	SW846-6010B	MG/L		0.250		0.210		84			20	80 - 120
Barium, Total	SW846-6010B	MG/L		5.00		4.86		97			20	80 - 120
Beryllium, Total	SW846-6010B	MG/L		0.1250		0.1190		95			20	80 - 120
Cadmium, Total	SW846-6010B	MG/L		0.125		0.123		98			20	80 - 120
Chromium, Total	SW846-6010B	MG/L		0.500		0.480		96			20	80 - 120
Lead, Total	SW846-6010B	MG/L		0.2500		0.2200		88			20	80 - 120
Nickel, Total	SW846-6010B	MG/L		1.25		1.22		98			20	80 - 120
Selenium, Total	SW846-6010B	MG/L		0.2500		0.2300		92			20	80 - 120
Silver, Total	SW846-6010B	MG/L		0.625		0.621		99			20	80 - 120

\* Indicate values outside of QC limits

RPD : 0 out of 0 outside limits

Spike Recovery : 0 out of 10 outside limits



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The Woodlands, TX 77380

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MS/MSD SUMMARY REPORT

TOTAL METALS

CLIENT NAME : CKG SERVICES DATE RECEIVED : 06/12/2008  
PROJECT NAME : MONTGOMERY CTY PAINT WASH PRINTED ON : 06/25/2008 11:49  
PROJECT NUMBER :

SAMPLE MATRIX : LIQUID

SAMPLE

SAMPLE ID : 9162.001  
CLIENT SAMPLE ID : 0001

MATRIX SPIKE

MS SAMPLE ID : 9162.001MS  
CLIENT SAMPLE ID : 0001MS

MATRIX SPIKE DUPLICATE

MSD SAMPLE ID : 9162.001MSD  
CLIENT SAMPLE ID : 0001MSD

COMPOUND	METHOD	UNITS	MS SPIKE	MSD SPIKE	SAMPLE CONC	MS CONC	MSD CONC	MS RECOVER (%)	MSD RECOVER (%)	RED	RPD LIMIT	QC LIMIT REC
Mercury, Total	SW846-7470A	MG/L	0.0012	0.0012	0	0.0014	0.0012	117	100	15.7	30	75 - 125

\* Indicate values outside of QC limits

RPD : 0 out of 1 outside limits  
Spike Recovery : 0 out of 2 outside limits

**END OF REPORT**

2876  
Greenhunter Biofuels



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/9/2008

Dear Steve Sams

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2876

**Expiration Date** 7/9/2010

**Generator:** Green Hunter Biofuels

**Address:** 13605 Industrial Blvd  
Houston, TX 77015

### Waste Information

**Name of Waste:** Neutralized sulfuric acid

**TCEQ Waste Code #:** CESQ1041

**Container Type:**

**Detailed Description of Process Generating Waste:**

Sulfuric acid spilled into a sump and was neutralized

**Color:** clear/brown

**Odor:** mild

**pH:** neutral

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

LRP waste water.


**CES Environmental Services, Inc.**

4904 Griggs Road Houston, TX 77021  
 Phone: (713) 676-1460 Fax: (713) 676-1676  
 http://www.cesenvironmental.com  
 TCEQ Industrial Solid Waste Permit No: 30948  
 U.S. EPA ID No: TXD008950461 ISWR No: 30900

**SECTION 1: Generator Information**

Company: GREEN HUNTER BIOFUELS, INC.  
 Address: 13605 INDUSTRIAL ROAD  
 City, State, Zip: HOUSTON, TEXAS  
 Contact: STEVE SAMS Title: AUTH. BROKER FOR GENERATOR  
 Phone No: 713-530-4550 Fax No: 281-424-7748  
 24/hr Phone: 281-838-3400  
 U.S. EPA I.D. No: TXR000000 349  
 State I.D. CESQG SIC Code:

**SECTION 2: Billing Information - ☐ Same as Above**

Company: PHOENIX POLLUTION CONTROL & ENVIRONMENTAL SERVICES, INC.  
 Address: 720 S. LYNCHBURG ROAD  
 City, State, Zip: BAYTOWN, TEXAS 77520  
 Contact: STEVE SAMS Title: AUTH. BROKER FOR GENERATOR  
 Phone No: 281-838-3400 Fax No: 281-424-7748

**SECTION 3: General Description of the Waste**

Name of Waste: NEUTRALIZED SULFURIC CAUSTIC ACID  
 Detailed Description of Process Generating Waste: SULFURIC ACID SPILLED INTO A SUMP AND WAS NEUTRALIZED.

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: CLEAR/BRN Odor: MILD

Specific Gravity (water=1) 1 Density: 8.34 lbs/gal

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)

Container Size: 5,000

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☒ Yearly

Number of Units (containers): 1 Other:

Texas State Waste Code No: CESG-1041

Proper U.S. DOT Shipping Name: NM RCRA / Non DOT Regulated Water

Class: N/A UN/NA: N/A PG: N/A RQ: N/A

Flash Point N/A	pH N/A neutral	Reactive Sulfides N/Amg/l	Reactive Cyanides N/Amg/l	Solids N/A%
Oil & Grease N/Amg/l	TOC N/Amg/l	Zinc N/Amg/l	Copper N/Amg/l	Nickel N/Amg/l

**SECTION 4: Physical and Chemical Data**

COMPONENTS TABLE		Concentration	Units
The waste consists of the following materials		Ranges are acceptable	or %
Water		98-99%	2/3
Sulfuric Acid neutralized w/Carbide		1-2	6/9

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

---

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.

N/A

**SECTION 7: Incompatibilities**

Please list all incompatibilities (if any):

N/A

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: ☒ X  
 TCLP Volatiles: ☒ X  
 TCLP Semi-Volatiles: ☒ X  
 Reactivity: ☒ X  
 Corrosivity: ☒ X  
 Ignitability: ☒ X

**SECTION 9: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: [Signature]

Date: 07-03-08

Printed Name/Title: STEVE Sams / AUTH. BROKER FOR AGENT

**CES USE ONLY (DO NOT WRITE IN THIS SPACE)**

Compliance Officer: [Signature]

Additional Information: \_\_\_\_\_

Date: 7-9-08

Approved ☒

Rejected ☐

Approval Number: 2876

**SECTION 10: Waste Receipt Classification Under 40 CFR 437**

Is this material a wastewater or wastewater sludge? ☒ YES ☐ NO

If 'Yes', complete this section.

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.**

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☒ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

- (1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.
- (2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

- (3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☒ Metals Subcategory

☐ Oils Subcategory

☐ Organics Subcategory

#### **SECTION 11: Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

1. **Base Pricing (including freight):**

\$0.10/ gal

2. **Contamination Limits (maximum limit before surcharges apply):**

std

3. **Surcharge Pricing:**

std per rate sheet

4. **Special Testing Requirements:**

TOC, metals, % solids, phenol; the pH must be neutral.

5. **Treatment and Handling Protocol:**

6. **Treated Wastewater Discharge Subcategory:**

☒ Subcategory A

☐ Subcategory B

☐ Subcategory C

7. **Tests for Product Recovered/Recycled (if applicable):**

--

8. **Management for Product Recovered/Recycled (if applicable):**

--

2080

Zach System Corp (La Porte)



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/9/2008

Dear Ronald Smith

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2880

**Expiration Date** 7/9/2010

**Generator:** ZaCh System Corp. (La Porte)

**Address:** 914 South 16th Street  
La Porte, TX 77571

### Waste Information

**Name of Waste:** NMP Step 4, Part II & Parts of Step 5

**TCEQ Waste Code #:** 0064203H

**Container Type:**

**Detailed Description of Process Generating Waste:**

Off-spec material from a pharmaceutical manufacturing plant

**Color:** Dark **Odor:** Alcohols/Solvents/MT **pH:** na

**Physical State:**

**Incompatibilities:** Oxidizers

**Safety Related Data/Special Handling:**

Std PPE (rubber gloves, hard hat, goggles, etc)

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

*NAH*



4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676

<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

**SECTION 1: Generator Information**

Company: Zach System Corp.  
Address: 914 South 16th St.  
City: La Porte State: TX Zip: 77571  
Contact: Ron Smith Title: \_\_\_\_\_  
Phone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_  
24/hr Phone Number: \_\_\_\_\_  
US EPA ID No: TX R000079012  
State ID No: 88429 SIC Code: \_\_\_\_\_

**SECTION 2: Billing Information -**

☒ Same as Above

Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Contact: \_\_\_\_\_ Title: \_\_\_\_\_  
Phone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_

**SECTION 3: General Description of the Waste**

Name of Waste: NMP Step 4, PART II & PARTS of Step 5  
Detailed Description of Process Generating Waste: \_\_\_\_\_

off spec material from a pharmaceutical manufacturing plant

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: DARK Odor: Alcohols / Solvents / MTBE

Specific Gravity (water=1): 1.14-1.87 Density: 6-7 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☐ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☐ Single-phase ☒ Multi-phase

Container Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)

Frequency: ☒ Weekly ☐ Monthly ☐ Yearly ☐ One-Time

Quantity: 5000

**Is this a USEPA "Hazardous Waste" per 40CFR 261.3?**

☒ Yes

~~1~~ No *DN*

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☒ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

### Characteristic for Toxic Metals:

☐ D004    ☐ D005    ☐ D006    ☐ D007    ☐ D008    ☐ D009  
☐ D010    ☐ D011

**Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)**

**Is this an "F" or "K" Listed waste or mixed with one?**

☐ Yes☒ No

**If "Yes", then please list ALL applicable codes:**

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No

☐ Yes ☒ No

**If "Yes", then please list ALL applicable codes:**

**Texas State Waste Code Number:**

0064203H

**Proper US DOT Shipping Name:**

**Class:**

2

UN/NA:

19

**PG :**

0

**RQ:**

100-

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
≤ 120		NA		0 mg/l		0 mg/l		0 %	
Oil & Grease		TOC		Zinc		Copper		Nickel	
≥ 1500	mg/l	N/A	mg/l	N/A	mg/l	N/A	mg/l	N/A	mg/l

#### **SECTION 4:** Physical and Chemical Data

[illegible]

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

STANDARD PPE (rubber gloves, hard hat, goggles, etc.)

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.

WASTE TREATMENT DMP STEP 4

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

oxidizers

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:

☒

TCLP Volatiles:

☒

TCLP Semi-Volatiles:

☒

Reactivity:

☒

Corrosivity:

☒

Ignitability:

☒

**SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)**

Is this material a wastewater or wastewater sludge?

☐ YES

☒ NO

If 'Yes', complete this section.

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.**

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(3)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

**SECTION 10: Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

**SECTION 11: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: *Ronald Smith*Date: 7-7-08Printed Name/Title: RONALD Smith - EHS Manager**CES USE ONLY (DO NOT WRITE IN THIS SPACE)**Compliance Officer: *Robert King*Date: 7-9-08Approval Number: 2880☒ Approved☐ Rejected

1. Base Pricing (including freight):

0.35/gallon + \$500 - freight + FSC

2. Contamination Limit (maximum limit before surcharges apply):

3. Surcharge Pricing:

N/A

4. Special Testing Requirements:

Lab needs to determine how much water to use to wash the load & separate alcohols from MTBE/heptane/xylene

5. Treatment and Handling Protocol:

WASH ~~PHASE~~ WITH SMALLEST AMOUNT OF WATER REQUIRED TO SEPARATE ALCOHOLS FROM MTBE/Xylene. Check with Product Sales to determine if alcohol + water can go into mixed alcohols AS-13 (give Product Sales 70 water). TOP PHASE should go

into "Restricted Light Ends from Processing" trailer

6. Treated Wastewater Discharge Subcategory: Water Wash phase should go to distillation.

☐ Subcategory A

☐ Subcategory B

☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**7. Tests for Product Recovered/Recycled (if applicable):**

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**8. Management for Product Recovered/Recycled (if applicable)**

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NONE OF THE  
RESIDUE FROM THE  
RECYCLING PROCESS  
WILL GO INTO A  
LANDFILL

<b>1. Generator Information</b> Name: <u>Zach System Corp</u> Address: <u>914 Sabine North Street</u> <u>La Porte, TX 77571</u> EPA ID No.: <u>TX800079062</u> Manifest No.:	<b>2. Receiving Facility Information</b> Name: <u>CES Environmental Services, Inc.</u> Address: <u>4904 Griggs Road</u> <u>Houston, TX 77021</u> EPA ID No.: <u>TXD008950461</u>
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3. Waste Description at Point of Generation					
Line Item	Waste Description	Hazardous Waste Codes	LDR Subcategory	WW / NWW	Underlying Hazardous Constituents [268.2(i)]
1					
2					
3					
4					
5					

4. Waste Disposition				
Line Item	Subtitle C Exclusion Subsequent to Point of Generation (if applicable)	Current Disposition of Waste	268.45, Table 1 Technology used to treat debris (if applicable)	Date Shipped
1				
2				
3				
4				
5				

5. Was the waste hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste or exempt from Subtitle C regulation (including characteristic wastes managed in wastewater treatment systems discharging under the CWA)?  
☐ Yes ☐ No (if yes, this constitutes the 268.7(a)(7) one-time notification.)

6. Was the waste characteristic at the point of generation, treated onsite to remove the characteristic, and treatment residues then shipped to a Subtitle D land disposal facility? ☐ Yes ☐ No (if yes, complete Certification 1 or 2.)

7. Was the waste "debris" that was hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste under 261.3(f)(1) by treating it using an extraction or destruction technology in 268.45, Table 1? ☐ Yes ☐ No (if yes, complete Certification 3.)

8. Was the waste "debris" that was hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste under 261.3(f)(2) by receiving a "no-longer-contains" determination from EPA or the authorized state? ☐ Yes ☐ No (if yes, this constitutes the 268.7(d)(1) one-time notification.)

9. Is the waste residue from treating K061, K062 and/or F006 wastes in high-temperature metals recovery (HTMR) units that 1) meets the generic exclusion levels in 261.3(c)(2)(ii)(C), 2) does not exhibit any characteristics, and 3) is shipped to a Subtitle D land disposal facility? ☐ Yes ☐ No (if yes, complete Certification 4.)

<b>10.</b> <input type="checkbox"/> Waste that has been treated to remove a characteristic and meets underlying hazardous constituents standards.  I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 to remove the hazardous characteristics and that underlying hazardous constituents, as defined in 268.2(i) have been treated on-site to meet the 268.48 Universal Treatment Standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to items:  Reference: 268.7(b)(4)(v) and 268.9(d)
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<b>11.</b> <input type="checkbox"/> Waste that has been treated to remove a characteristic but does not meet underlying hazardous constituents standards.  I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 or 268.49 to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to items:  Reference: 268.7(b)(4)(v) and 268.9(d)
--	--

<b>12.</b> <input type="checkbox"/> Debris that has been treated to meet the alternative treatment standards.  I certify under penalty of law that the debris has been treated in accordance with the requirements of 40 CFR 268.45. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to items:  Reference: 268.7(b)(4)(v) and 268.9(d)
--	--

<b>13.</b> <input type="checkbox"/> HTMR residue from treating K061, K062 and/or F006 wastes.  I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characteristic of hazardous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to items:  Reference: 268.7(b)(4)(v) and 268.9(d)
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**Authorized Signature:**
**Date:**
**Printed Name / Title:**



## UNDERLYING HAZARDOUS CONSTITUENTS (UHC)

Generator

Mailing Address

City, State, Zip

EPA ID Number

Manifest Number

CES Profile Number

EPA Waste Codes

If your waste, at the point of generation, exceeds the limits of the following constituents, then please represent this fact to CES Environmental Services, Inc. by checking the applicable box listed below.

Does this waste contain one or more of the constituents listed on pages 1, 2, 3 or 4?

☐ YES☐ NO

If "Yes", check applicable constituents and then sign and date the form. If "No", then sign and date the form.

Description	CAS No. [1]	Wastewater mg/l [2]	Non-Wastewater mg/kg
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Description	CAS No. [1]	Wastewater mg/l [2]	Non-Wastewater mg/kg
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☒ I. Organic Constituents

<input type="checkbox"/> 2-Acetylaminofluorene	53-96-3	0.059	140
<input type="checkbox"/> 4-Aminobiphenyl	92-67-1	0.13	NA
<input type="checkbox"/> o-Anisidine (2-methoxyaniline)	90-04-0	0.010	0.66
<input type="checkbox"/> Acenaphthene	83-32-9	0.059	3.4
<input type="checkbox"/> Acenaphthylene	208-96-8	0.059	3.4
<input type="checkbox"/> Acetone	67-64-1	0.28	160
<input type="checkbox"/> Acetonitrile	75-05-8	5.6	38
<input type="checkbox"/> Acetophenone	96-86-2	0.01	9.7
<input type="checkbox"/> Acrolein	107-02-8	0.29	NA
<input type="checkbox"/> Acrylamide	79-06-1	19	23
<input type="checkbox"/> Acrylonitrile	107-13-1	0.24	84
<input type="checkbox"/> Aldicarb sulfone [6]	1646-88-4	0.056	0.28
<input type="checkbox"/> Aldrin	309-00-2	0.021	0.066
<input type="checkbox"/> alpha-BHC	319-84-6	0.00014	0.066
<input type="checkbox"/> Aniline	62-53-3	0.81	14
<input type="checkbox"/> Anthracene	120-12-7	0.059	3.4
<input type="checkbox"/> Aramite	140-57-8	0.36	NA
<input type="checkbox"/> 2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	88-85-7	0.066	2.5
<input type="checkbox"/> 4-Bromophenyl phenyl ether	101-55-3	0.055	15
<input type="checkbox"/> Barban [6]	101-27-9	0.056	1.4
<input type="checkbox"/> Bendiocarb [6]	22781-23-3	0.056	1.4
<input type="checkbox"/> Benomyl [6]	17804-35-2	0.056	1.4
<input type="checkbox"/> Benz(a)anthracene	56-55-3	0.059	3.4
<input type="checkbox"/> Benzal chloride	98-87-3	0.055	6
<input type="checkbox"/> Benzene	71-43-2	0.14	10
<input type="checkbox"/> Benzo(a)pyrene	50-32-8	0.061	3.4
<input type="checkbox"/> Benzo(b)fluoranthene	205-99-2	0.11	6.8
<input type="checkbox"/> Benzo(g,h,i)perylene	191-24-2	0.0055	1.8
<input type="checkbox"/> Benzo(k)fluoranthene	207-08-9	0.11	6.8
<input type="checkbox"/> beta-BHC	319-85-7	0.00014	0.066
<input type="checkbox"/> bis(2-Chloroisopropyl)ether	39638-32-9	0.055	7.2

☒

<input type="checkbox"/> bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
<input type="checkbox"/> bis-(2-Chloroethoxy)methane	111-91-1	0.036	7.2
<input type="checkbox"/> bis-(2-Chloroethyl)ether	111-44-4	0.033	6
<input type="checkbox"/> Bromodichloromethane	75-27-4	0.35	15
<input type="checkbox"/> Bromoform (Tribromomethane)	75-25-2	0.63	15
<input type="checkbox"/> Bromomethane/Methyl bromide	74-83-9	0.11	15
<input type="checkbox"/> Butyl benzyl phthalate	85-68-7	0.017	28
<input type="checkbox"/> Butylate [6]	2008-41-5	0.042	1.4
<input type="checkbox"/> 2-chloro-1,3-butadiene	126-99-8	0.057	0.28
<input type="checkbox"/> 2-Chloroethyl vinyl ether	110-75-8	0.062	NA
<input type="checkbox"/> 2-Chloronaphthalene	91-58-7	0.055	5.6
<input type="checkbox"/> 2-Chlorophenol	95-57-8	0.044	5.7
<input type="checkbox"/> 3-Chloropropylene	107-05-1	0.036	30
<input type="checkbox"/> Carbaryl [6]	63-25-2	0.006	0.14
<input type="checkbox"/> Carbenzadim [6]	10605-21-7	0.056	1.4
<input type="checkbox"/> Carbofuran [6]	1563-66-2	0.006	0.14
<input type="checkbox"/> Carbofuran phenol [6]	1563-38-8	0.056	1.4
<input type="checkbox"/> Carbon disulfide	75-15-0	3.8	4.8mg/l
<input type="checkbox"/> Carbon tetrachloride	56-23-5	0.057	6
<input type="checkbox"/> Carbosulfan [6]	55285-14-8	0.028	1.4
<input type="checkbox"/> Chlordane (alpha and gamma isomers)	57-74-9	0.0033	0.26
<input type="checkbox"/> Chlorobenzene	108-90-7	0.057	6
<input type="checkbox"/> Chlorobenzilate	510-15-6	0.1	NA
<input type="checkbox"/> Chlorodibromomethane	124-48-1	0.057	15
<input type="checkbox"/> Chloroethane	75-00-3	0.27	6
<input type="checkbox"/> Chloroform	67-66-3	0.046	6
<input type="checkbox"/> Chloromethane (Methyl chloride)	74-87-3	0.19	30
<input type="checkbox"/> Chrysene	218-01-9	0.059	3.4
<input type="checkbox"/> m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77	5.6
<input type="checkbox"/> m-Cumenyl methylcarbamate [6]	64-00-6	0.056	1.4

✓ I. Organic Constituents (continued)			
<input type="checkbox"/> cis-1,3-Dichloropropylene	10061-01-5	0.036	18
<input type="checkbox"/> Cyclohexanone	108-94-1	0.36	0.75 mg/l TCLP
<input type="checkbox"/> 1,1-Dichloroethane	75-34-3	0.059	6
<input type="checkbox"/> 1,1-Dichloroethylene	75-35-4	0.025	6
<input type="checkbox"/> 1,2-Dibromo-3-chloropropane	96-12-8	0.11	15
<input type="checkbox"/> 1,2-Dichloroethane	107-06-2	0.21	6
<input type="checkbox"/> trans-1,2-Dichloroethylene	156-60-5	0.054	30
<input type="checkbox"/> 1,2-Dichloropropane	78-87-5	0.85	18
<input type="checkbox"/> 1,2-Diphenylhydrazine	122-66-7	0.087	NA
<input type="checkbox"/> trans-1,3-Dichloropropylene	10061-02-6	0.036	18
<input type="checkbox"/> 1,4-Dinitrobenzene	100-25-4	0.32	2.3
<input type="checkbox"/> 1,4-Dioxane	123-91-1	12	170
<input type="checkbox"/> 2,4-Dichlorophenol	120-83-2	0.044	14
<input type="checkbox"/> 2,4-Dichlorophenoxyacetic acid/2,4-D	94-75-7	0.72	10
<input type="checkbox"/> 2,4-Dinitrophenol	51-28-5	0.12	160
<input type="checkbox"/> 2,4-Dinitrotoluene	121-14-2	0.32	140
<input type="checkbox"/> 2,6-Dichlorophenol	87-65-0	0.044	14
<input type="checkbox"/> 2,6-Dinitrotoluene	606-20-2	0.55	28
<input type="checkbox"/> 2,4-D (2,4-Dichlorophenoxyacetic acid)	94-75-7	0.72	10
<input type="checkbox"/> 2,4-Dimethyl phenol	105-67-9	0.036	14
<input type="checkbox"/> 2,4-Dimethylaniline (2,4-xylydine)	95-68-1	0.010	0.66
<input type="checkbox"/> 4,6-Dinitro-o-cresol	534-52-1	0.28	160
<input type="checkbox"/> delta-BHC	319-86-8	0.023	0.066
<input type="checkbox"/> di-n-butyl phthalate	84-74-2	0.057	28
<input type="checkbox"/> Di-n-octyl phthalate	117-84-0	0.017	28
<input type="checkbox"/> Di-n-propylnitrosamine	621-64-7	0.4	14
<input type="checkbox"/> Dibenz(a,e)pyrene	192-65-4	0.061	NA
<input type="checkbox"/> Dibenz(a,h)anthracene	53-70-3	0.055	8.2
<input type="checkbox"/> Dibromomethane	74-95-3	0.11	15
<input type="checkbox"/> Dichlorodifluoromethane	75-71-8	0.23	7.2
<input type="checkbox"/> Dieldrin	60-57-1	0.017	0.13
<input type="checkbox"/> Diethyl phthalate	84-66-2	0.2	28
<input type="checkbox"/> Dimethyl phthalate	131-11-3	0.047	28
<input type="checkbox"/> Diphenylamine	122-39-4	0.92	13
<input type="checkbox"/> Diphenylnitrosamine	86-30-6	0.92	13
<input type="checkbox"/> Disulfoton	298-04-4	0.017	6.2
<input type="checkbox"/> Dithiocarbamates (total) [6]	137-30-4	0.028	28
<input type="checkbox"/> Endosulfan I	959-98-8	0.023	0.066
<input type="checkbox"/> Endosulfan II	33213-65-9	0.029	0.13
<input type="checkbox"/> Endosulfan sulfate	1031-07-8	0.029	0.13
<input type="checkbox"/> Endrin	72-20-8	0.0028	0.13
<input type="checkbox"/> Endrin aldehyde	7421-93-4	0.025	0.13
<input type="checkbox"/> EPTC [6]	759-94-4	0.042	1.4
<input type="checkbox"/> Ethyl acetate	141-78-6	0.34	33
<input type="checkbox"/> Ethyl benzene	100-41-4	0.057	10
<input type="checkbox"/> Ethyl cyanide/propanenitrile	107-12-0	0.24	360
<input type="checkbox"/> Ethyl ether	60-29-7	0.12	160
<input type="checkbox"/> Ethyl methacrylate	97-63-2	0.14	160
<input type="checkbox"/> Ethyl Oxide	75-21-8	0.12	NA
<input type="checkbox"/> Ethylene dibromide (1,2-Dibromoethane)	106-93-4	0.028	15
<input type="checkbox"/> Famphur	52-85-7	0.017	15
<input type="checkbox"/> Fluoranthene	206-44-0	0.068	3.4

✓	Fluorene	86-73-7	0.059	3.4
	Formetanate hydrochloride [6]	23422-53-9	0.056	1.4
	gamma-BHC	58-89-9	0.0017	0.066
<input type="checkbox"/>	Heptachlor	76-44-8	0.0012	0.066
<input type="checkbox"/>	Heptachlor epoxide	1024-57-3	0.016	0.066
<input type="checkbox"/>	Hexachlorobenzene	118-74-1	0.055	10
<input type="checkbox"/>	Hexachlorobutadiene	87-68-3	0.055	5.6
<input type="checkbox"/>	Hexachlorocyclopentadiene	77-47-4	0.057	2.4
<input type="checkbox"/>	Hexachloroethane	67-72-1	0.055	30
<input type="checkbox"/>	Hexachloropropylene	1888-71-7	0.035	30
<input type="checkbox"/>	HxCDDs (All Hexachlorodibenzo-p-dioxins)	N/A	0.000063	0.001
<input type="checkbox"/>	HxCDFs (All Hexachlorodibenzofurans)	N/A	0.000063	0.001
<input type="checkbox"/>	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	35822-46-9	0.000035	0.0025
<input type="checkbox"/>	1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	0.000035	0.0025
<input type="checkbox"/>	1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	0.000035	0.0025
<input type="checkbox"/>	Ideno (1,2,3-c,d) pyrene	193-39-5	0.0055	3.4
<input type="checkbox"/>	Iodomethane	74-88-4	0.19	65
<input type="checkbox"/>	Isobutyl alcohol	78-83-1	5.6	170
<input type="checkbox"/>	Isodrin	465-73-6	0.021	0.066
<input type="checkbox"/>	Isosafrole	120-58-1	0.081	2.6
<input type="checkbox"/>	Kepone	143-50-0	0.0011	0.13
<input type="checkbox"/>	3-Methylcholanthrene	56-49-5	0.0055	15
<input type="checkbox"/>	4,4-Methylene bis (2-chloroaniline)	101-14-4	0.5	30
<input type="checkbox"/>	m-Dichlorobenzene	541-73-1	0.036	6
<input type="checkbox"/>	Methacrylonitrile	126-98-7	0.24	84
<input type="checkbox"/>	Methanol	67-56-1	5.6	0.75 mg/l TCLP
<input type="checkbox"/>	Methiocarb [6]	2032-65-7	0.056	1.4
<input type="checkbox"/>	Methomyl [6]	16752-77-5	0.028	0.14
<input type="checkbox"/>	Methoxychlor	72-43-5	0.25	0.18
<input type="checkbox"/>	Methapyrilene	91-80-5	0.081	1.5
<input type="checkbox"/>	Methyl ethyl ketone	78-93-3	0.28	36
<input type="checkbox"/>	Methyl isobutyl ketone	108-10-1	0.14	33
<input type="checkbox"/>	Methyl methacrylate	80-62-6	0.14	160
<input type="checkbox"/>	Methyl methansulfonate	66-27-3	0.018	NA
<input type="checkbox"/>	Methyl parathion	298-00-0	0.014	4.6
<input type="checkbox"/>	Methylene chloride	75-09-2	0.089	30
<input type="checkbox"/>	Metolcarb [6]	1129-41-5	0.056	1.4
<input type="checkbox"/>	Mexacarbate [6]	315-18-4	0.056	1.4
<input type="checkbox"/>	Molinate [6]	2212-67-1	0.042	1.4
<input type="checkbox"/>	2-Naphthylamine	91-59-8	0.52	NA
<input type="checkbox"/>	5-Nitro-o-toluidine	99-55-8	0.32	28
<input type="checkbox"/>	n-Butyl alcohol	71-36-3	5.6	2.6
<input type="checkbox"/>	N-Nitroso-di-n-butylamine	924-16-3	0.4	17
<input type="checkbox"/>	N-Nitrosodiethylamine	55-18-5	0.4	28
<input type="checkbox"/>	N-Nitrosodimethylamine	62-75-9	0.4	2.3
<input type="checkbox"/>	N-Nitrosomethylethylamine	10595-95-6	0.4	2.3
<input type="checkbox"/>	N-Nitrosomorpholine	59-89-2	0.4	2.3
<input type="checkbox"/>	N-Nitrosopiperidine	100-75-4	0.013	35
<input type="checkbox"/>	N-Nitrosopyrrolidine	930-55-2	0.013	35
<input type="checkbox"/>	Naphthalene	91-20-3	0.059	5.6
<input type="checkbox"/>	Nitrobenzene	98-95-3	0.068	14
<input type="checkbox"/>	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	3268-87-9	0.000063	0.005

✓ I. Organic Constituents (continued)			
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	39001-02-0	0.000063	0.005
o,p-DDD	53-19-0	0.023	0.087
o,p-DDE	3424-82-6	0.031	0.087
o,p-DDT	789-02-6	0.0039	0.087
o-Cresol	95-48-7	0.11	5.6
o-Dichlorobenzene	95-50-1	0.088	6
o-Nitroaniline	88-74-4	0.27	14
o-Nitrophenol	88-75-5	0.028	13
Oxamyl [6]	23135-22-0	0.056	0.28
1,3-Phenylenediamine	108-45-2	0.010	0.66
p-Cresidine	120-71-8	0.010	0.66
p,p-DDD	72-54-8	0.023	0.087
p,p-DDE	72-55-9	0.031	0.087
p,p-DDT	50-29-3	0.0039	0.087
p-Chloro-m-cresol	59-50-7	0.018	14
p-Chloroaniline	106-47-8	0.46	16
p-Cresol	106-44-5	0.77	5.6
(difficult to distinguish from m-cresol)			
p-Dichlorobenzene	106-46-7	0.09	6
p-Dimethylaminoazobenzene	60-11-7	0.13	NA
p-Nitroaniline	100-01-6	0.028	28
p-Nitrophenol	100-02-7	0.12	29
Parathion	56-38-2	0.014	4.6
Pebulate [6]	1114-71-2	0.042	1.4
PeCDDs (All Pentachlorodibenzo-p-dioxins)	N/A	0.000063	0.001
PeCDFs (All Pentachlorodiebenzofurans)	N/A	0.000035	0.001
Pentachlorobenzene	608-93-5	0.055	10
Pentachloroethane	76-01-7	0.055	6
Pentachloronitrobenzene	82-68-8	0.055	4.8
Pentachlorophenol	87-86-5	0.089	7.4
Phenacetin	62-44-2	0.081	16
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Phorate	298-02-2	0.021	4.6
Phthalic acid	100-21-0	0.055	28
Phthalic anhydride	85-44-9	0.055	28
Physostigmine [6]	57-47-6	0.056	1.4
Physostigmine salicylate [6]	57-64-7	0.056	1.4
Promecarb [6]	2631-37-0	0.056	1.4
Pronamide	23950-58-5	0.093	1.5
Propham [6]	122-42-9	0.056	1.4
Propoxur [6]	114-26-1	0.056	1.4
Prosulfocarb [6]	52888-80-9	0.042	1.4
Pyrene	129-00-0	0.067	8.2
Pyridine	110-86-1	0.014	16
Safrole	94-59-7	0.081	22
Silvex (2,4,5-TP)	93-72-1	0.72	7.9
1,1,1,2-Tetrachloroethane	630-20-6	0.057	6
1,1,1-Trichloroethane	71-55-6	0.054	6
1,1,2,2-Tetrachloroethane	79-34-5	0.057	6
1,1,2-Trichloro-2,2,2-trifluoroethane	76-13-1	0.057	30
1,1,2-Trichloroethane	79-00-5	0.054	6

1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
1,2,4-Trichlorobenzene	120-82-1	0.055	19
1,2,3-Trichloropropane	96-18-4	0.85	30
2,3,4,6-Tetrachlorophenol	58-90-2	0.03	7.4
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	93-76-5	0.72	7.9
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4
TCDDs (All Tetrachlorodibenzo-p-dioxins)	N/A	0.000063	0.001
TCDFs (All Tetrachlorodiebenzofurans)	N/A	0.000063	0.001
Tetrachloroethylene	127-18-4	0.056	6
Thiodicarb [6]	59669-26-0	0.019	1.4
Thiophanate-methyl [6]	23564-05-8	0.056	1.4
Toluene	108-88-3	0.08	10
Total PCBs	1336-36-3	0.1	10
(sum of all PCB isomers, or all Aroclors)			
Toxaphene	8001-35-2	0.0095	2.6
Triallate [6]	2303-17-8	0.042	1.4
Trichloroethylene	79-01-6	0.054	6
Trichloromonofluoromethane	75-69-4	0.02	30
Triethylamine [6]	101-44-8	0.081	1.5
tris-(2,3-Dibromopropyl) phosphate	126-72-7	0.11	0.1
Vernolate [6]	1929-77-7	0.042	1.4
Vinyl chloride	75-01-4	0.27	6
Xylenes-mixed isomers	1330-20-7	0.32	30
(sum of o-, m-, and p-xylene concentrations)			

<b>II. Inorganic Constituents</b>			
<input type="checkbox"/>	Antimony	7440-36-0	1.9 * 1.15 mg/l TCLP
<input type="checkbox"/>	Arsenic	7440-38-2	1.4 * 5.0 mg/l TCLP
<input type="checkbox"/>	Barium	7440-39-3	1.2 * 21.0 mg/l TCLP
<input type="checkbox"/>	Beryllium	7440-41-7	0.82 * 1.22 mg/l TCLP
<input type="checkbox"/>	Cadmium	7440-43-9	0.69 * 0.11 mg/l TCLP
<input type="checkbox"/>	Chromium (Total)	7440-47-3	2.77 * 0.60 mg/l TCLP
<input type="checkbox"/>	Cyanides (Amenable) [4]	57-12-5	0.86 30
<input type="checkbox"/>	Cyanides (Total) [4]	57-12-5	1.2 590
<input type="checkbox"/>	Fluoride [5]	16984-48-8	35 NA
<input type="checkbox"/>	Lead	7439-92-1	0.69 * 0.75 mg/l TCLP
<input type="checkbox"/>	Mercury - All others	7439-97-6	0.15 * 0.025 mg/l TCLP
<input type="checkbox"/>	Mercury - Retort nonwastewater	7439-97-6	NA * 0.20 mg/l TCLP
<input type="checkbox"/>	Nickel	7440-02-0	3.98 * 11.0 mg/l TCLP
<input type="checkbox"/>	Selenium	7782-49-2	0.82 * 5.7 mg/l TCLP
<input type="checkbox"/>	Silver	7440-22-4	0.43 * 0.14 mg/l TCLP
<input type="checkbox"/>	Sulfide	18496-25-8	14 NA
<input type="checkbox"/>	Thallium	7440-28-0	1.4 * 0.2 mg/l TCLP
<input type="checkbox"/>	Vanadium [4]	7440-62-2	4.3 * 1.6 mg/l TCLP
<input type="checkbox"/>	Zinc [5]	7440-66-6	2.61 * 4.3 mg/l TCLP

I certify that the above is true and correct to the best of my knowledge.

\_\_\_\_\_  
Authorized Name (Print)

\_\_\_\_\_  
Title

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Date



**CES ENVIRONMENTAL SERVICES USA Inc. – UHC FORM**  
**UNDERLYING HAZARDOUS CONSTITUENTS**

**Date:** \_\_\_\_\_

**Generator:** \_\_\_\_\_  
**Address:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Profile No.** \_\_\_\_\_

The waste stream represented by the above **Profile Number** is below all of the concentration limits as indicated on table 268.48 (attached), with the exception of the D002 characteristic code and the Sulfide (D003 characteristic code, sulfide) which is circled.

**Certifying Representative:**

- a. \_\_\_\_\_  
**Print Name**
- b. \_\_\_\_\_  
**Signature**
- c. \_\_\_\_\_  
**Company**
- d. \_\_\_\_\_  
**Title**

All of a, b, c, d must be completed.



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/9/2008

Dear Ronald Smith

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2880

**Expiration Date** 7/9/2010

**Generator:** ZaCh System Corp. (La Porte)

**Address:** 914 South 16th Street  
La Porte, TX 77571

### Waste Information

**Name of Waste:** NMP Step 4, Part II & Parts of Step 5

**TCEQ Waste Code #:** 0064203H

**Container Type:**

**Detailed Description of Process Generating Waste:**

Off-spec material from a pharmaceutical manufacturing plant

**Color:** Dark **Odor:** Alcohols/Solvents/MT **pH:** na

**Physical State:**

**Incompatibilities:** Oxidizers

**Safety Related Data/Special Handling:**

Std PPE (rubber gloves, hard hat, goggles, etc)

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

YAP



**CES Environmental Services, Inc.**

4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676

<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

**SECTION 1: Generator Information**

Company: Zach System Corp.  
Address: 914 South 16th St.  
City: La Porte State: TX Zip: 77571  
Contact: Ron Smith Title: \_\_\_\_\_  
Phone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_  
24/hr Phone Number: \_\_\_\_\_  
US EPA ID No: TXR000079062  
State ID No: 88429 SIC Code: \_\_\_\_\_

**SECTION 2: Billing Information - ☒ Same as Above**

Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Contact: \_\_\_\_\_ Title: \_\_\_\_\_  
Phone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_

**SECTION 3: General Description of the Waste**

Name of Waste: NMP Step 4, PART II & PARTS of Step 5  
Detailed Description of Process Generating Waste: \_\_\_\_\_

off spec material from a pharmaceutical manufacturing plant

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: DARK Odor: Alcohols/Solvents/MTBE

Specific Gravity (water=1): 1.1-1.87 Density: 6-7 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☐ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☐ Single-phase ☒ Multi-phase

Container Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)

Frequency: ☒ Weekly ☐ Monthly ☐ Yearly ☐ One-Time

Quantity: 5000

**Is this a USEPA "Hazardous Waste" per 40CFR 261.3?**

☒ Yes

☒ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

**If "Yes", Is it:**

☒ D001 (Ignitable)

☐ D002 (Corrosive)☐ D003 (Reactive)

### Characteristic for Toxic Metals:

☐ D004

☐ D005

☐ D006

☐ D007

☐ D008

☐ D009

☐ D010

☐ D011

**Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)**

**Is this an "F" or "K" Listed waste or mixed with one?**

☐ Yes☒ No

**If "Yes", then please list ALL applicable codes:**

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No

☐ Yes☒ No

**If "Yes", then please list ALL applicable codes:**

**Texas State Waste Code Number:**

0064203H

**Proper US DOT Shipping Name:**

RQ: Flammable liquids n.o.s. (methyl tert-butyl ester)  
A: PG: 0 I RQ: 100

**Class:**

2

UN/NA:

1493

**PG :**

0

**RQ:**

10

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
≥ 120		NA		0 mg/l		0 mg/l		0 %	
Oil & Grease		TOC		Zinc		Copper		Nickel	
≥ 150	mg/l	N/A	mg/l	N/A	mg/l	N/A	mg/l	N/A	mg/l

#### **SECTION 4: Physical and Chemical Data**

[illegible]

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

STANDARD PPE (leather gloves, hard hat, goggles, etc.)

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.

WASTE TREATMENT NMP STEP 4

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

oxidizers

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:

X

TCLP Volatiles:

X

TCLP Semi-Volatiles:

X

Reactivity:

X

Corrosivity:

X

Ignitability:

X

**SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)**

Is this material a wastewater or wastewater sludge?

☐ YES

☒ NO

If 'Yes', complete this section.

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.**

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

**SECTION 10: Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

**SECTION 11: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Printed Name/Title: \_\_\_\_\_

RONALD SMITH - EHS MANAGER

**CES USE ONLY (DO NOT WRITE IN THIS SPACE)**

Compliance Officer: \_\_\_\_\_

Date: \_\_\_\_\_

Approval Number: \_\_\_\_\_

☒ Approved☐ Rejected

2880

1. Base Pricing (including freight):

0.35/gallon + \$500 - Freight + FSC

2. Contamination Limit (maximum limit before surcharges apply):

3. Surcharge Pricing:

N/A

4. Special Testing Requirements:

Lab needs to determine how much water to use to wash the load & separate alcohols from MTBE/heptane/xylene

5. Treatment and Handling Protocol:

WASH ~~PHASE~~ WITH SMALLEST AMOUNT OF WATER REQUIRED TO SEPARATE ALCOHOLS FROM MTBE/Xylene. Check with Product Sales to determine if alcohol + water can go into mixed alcohols AS-13 (give Product Sales 70 water). TOP PHASE should go into "Restricted Light Ends - from Processing" trailer

6. Treated Wastewater Discharge Subcategory: Water Wash phase should go to distillation.

☐ Subcategory A

☐ Subcategory B

☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**7. Tests for Product Recovered/Recycled (if applicable):**

--

**8. Management for Product Recovered/Recycled (if applicable)**

--

NONE OF THE  
RESIDUE FROM THE  
RECYCLING PROCESS  
WILL GO INTO A  
LANDFILL

<b>1. Generator Information</b> Name: <u>Zach System Corp</u> Address: <u>914 South 11th Street</u> <u>La Porte, TX 77571</u> EPA ID No.: <u>TXR000079062</u> Manifest No.:	<b>2. Receiving Facility Information</b> Name: <u>CES Environmental Services, Inc.</u> Address: <u>4904 Griggs Road</u> <u>Houston, TX 77021</u> EPA ID No.: <u>TXD008950461</u>
--	--

3. Waste Description at Point of Generation					
Line Item	Waste Description	Hazardous Waste Codes	LDR Subcategory	WW / NWW	Underlying Hazardous Constituents [268.2(i)]
1					
2					
3					
4					
5					

4. Waste Disposition				
Line Item	Subtitle C Exclusion Subsequent to Point of Generation (if applicable)	Current Disposition of Waste	268.45, Table 1 Technology used to treat debris (if applicable)	Date Shipped
1				
2				
3				
4				
5				

5. Was the waste hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste or exempt from Subtitle C regulation (including characteristic wastes managed in wastewater treatment systems discharging under the CWA)?  
☐ Yes ☐ No (If yes, this constitutes the 268.7(a)(7) one-time notification.)

6. Was the waste characteristic at the point of generation, treated onsite to remove the characteristic, and treatment residues then shipped to a Subtitle D land disposal facility? ☐ Yes ☐ No (if yes, complete Certification 1 or 2.)

7. Was the waste "debris" that was hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste under 261.3(f)(1) by treating it using an extraction or destruction technology in 268.45, Table 1? ☐ Yes ☐ No (if yes, complete Certification 3.)

8. Was the waste "debris" that was hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste under 261.3(f)(2) by receiving a "no-longer-contains" determination from EPA or the authorized state? ☐ Yes ☐ No (if yes, this constitutes the 268.7(d)(1) one-time notification.)

9. Is the waste residue from treating K061, K062 and/or F006 wastes in high-temperature metals recovery (HTMR) units that 1) meets the generic exclusion levels in 261.3(c)(2)(ii)(C), 2) does not exhibit any characteristics, and 3) is shipped to a Subtitle D land disposal facility? ☐ Yes ☐ No (if yes, complete Certification 4.)

<b>10.</b> <input type="checkbox"/> Waste that has been treated to remove a characteristic and meets underlying hazardous constituents standards.  I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 to remove the hazardous characteristics and that underlying hazardous constituents, as defined in 268.2(i) have been treated on-site to meet the 268.48 Universal Treatment Standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to items:  Reference: 268.7(b)(4)(v) and 268.9(d)
---	--

<b>11.</b> <input type="checkbox"/> Waste that has been treated to remove a characteristic but does not meet underlying hazardous constituents standards.  I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 or 268.49 to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to items:  Reference: 268.7(b)(4)(v) and 268.9(d)
--	--

<b>12.</b> <input type="checkbox"/> Debris that has been treated to meet the alternative treatment standards.  I certify under penalty of law that the debris has been treated in accordance with the requirements of 40 CFR 268.45. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to items:  Reference: 268.7(b)(4)(v) and 268.9(d)
--	--

<b>13.</b> <input type="checkbox"/> HTMR residue from treating K061, K062 and/or F006 wastes.  I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characteristic of hazardous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to items:  Reference: 268.7(b)(4)(v) and 268.9(d)
---	--

Authorized Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
 Printed Name / Title: \_\_\_\_\_



## UNDERLYING HAZARDOUS CONSTITUENTS (UHC)

Generator

Mailing Address

City, State, Zip

EPA ID Number

Manifest Number

CES Profile Number

EPA Waste Codes

If your waste, at the point of generation, exceeds the limits of the following constituents, then please represent this fact to CES Environmental Services, Inc. by checking the applicable box listed below.

Does this waste contain one or more of the constituents listed on pages 1, 2, 3 or 4?

☐ YES ☐ NO

If "Yes", check applicable constituents and then sign and date the form. If "No", then sign and date the form.

Description	CAS No. [1]	Wastewater mg/l [2]	Non-Wastewater mg/kg
<input checked="" type="checkbox"/> I. Organic Constituents			
<input type="checkbox"/> 2-Acetylaminofluorene	53-96-3	0.059	140
<input type="checkbox"/> 4-Aminobiphenyl	92-67-1	0.13	NA
<input type="checkbox"/> o-Anisidine (2-methoxyaniline)	90-04-0	0.010	0.66
<input type="checkbox"/> Acenaphthene	83-32-9	0.059	3.4
<input type="checkbox"/> Acenaphthylene	208-96-8	0.059	3.4
<input type="checkbox"/> Acetone	67-64-1	0.28	160
<input type="checkbox"/> Acetonitrile	75-05-8	5.6	38
<input type="checkbox"/> Acetophenone	96-86-2	0.01	9.7
<input type="checkbox"/> Acrolein	107-02-8	0.29	NA
<input type="checkbox"/> Acrylamide	79-06-1	19	23
<input type="checkbox"/> Acrylonitrile	107-13-1	0.24	84
<input type="checkbox"/> Aldicarb sulfone [6]	1646-88-4	0.056	0.28
<input type="checkbox"/> Aldrin	309-00-2	0.021	0.066
<input type="checkbox"/> alpha-BHC	319-84-6	0.00014	0.066
<input type="checkbox"/> Aniline	62-53-3	0.81	14
<input type="checkbox"/> Anthracene	120-12-7	0.059	3.4
<input type="checkbox"/> Aramite	140-57-8	0.36	NA
<input type="checkbox"/> 2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	88-85-7	0.066	2.5
<input type="checkbox"/> 4-Bromophenyl phenyl ether	101-55-3	0.055	15
<input type="checkbox"/> Barban [6]	101-27-9	0.056	1.4
<input type="checkbox"/> Bendiocarb [6]	22781-23-3	0.056	1.4
<input type="checkbox"/> Benomyl [6]	17804-35-2	0.056	1.4
<input type="checkbox"/> Benz(a)anthracene	56-55-3	0.059	3.4
<input type="checkbox"/> Benzal chloride	98-87-3	0.055	6
<input type="checkbox"/> Benzene	71-43-2	0.14	10
<input type="checkbox"/> Benzo(a)pyrene	50-32-8	0.061	3.4
<input type="checkbox"/> Benzo(b)fluoranthene	205-99-2	0.11	6.8
<input type="checkbox"/> Benzo(g,h,i)perylene	191-24-2	0.0055	1.8
<input type="checkbox"/> Benzo(k)fluoranthene	207-08-9	0.11	6.8
<input type="checkbox"/> beta-BHC	319-85-7	0.00014	0.066
<input type="checkbox"/> bis(2-Chloroisopropyl)ether	39638-32-9	0.055	7.2

Description	CAS No. [1]	Wastewater mg/l [2]	Non-Wastewater mg/kg
<input type="checkbox"/> bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
<input type="checkbox"/> bis-(2-Chloroethoxy)methane	111-91-1	0.036	7.2
<input type="checkbox"/> bis-(2-Chloroethyl)ether	111-44-4	0.033	6
<input type="checkbox"/> Bromodichloromethane	75-27-4	0.35	15
<input type="checkbox"/> Bromoform (Tribromomethane)	75-25-2	0.63	15
<input type="checkbox"/> Bromomethane/Methyl bromide	74-83-9	0.11	15
<input type="checkbox"/> Butyl benzyl phthalate	85-68-7	0.017	28
<input type="checkbox"/> Butylate [6]	2008-41-5	0.042	1.4
<input type="checkbox"/> 2-chloro-1,3-butadiene	126-99-8	0.057	0.28
<input type="checkbox"/> 2-Chloroethyl vinyl ether	110-75-8	0.062	NA
<input type="checkbox"/> 2-Chloronaphthalene	91-58-7	0.055	5.6
<input type="checkbox"/> 2-Chlorophenol	95-57-8	0.044	5.7
<input type="checkbox"/> 3-Chloropropylene	107-05-1	0.036	30
<input type="checkbox"/> Carbaryl [6]	63-25-2	0.006	0.14
<input type="checkbox"/> Carbenzadim [6]	10605-21-7	0.056	1.4
<input type="checkbox"/> Carbofuran [6]	1563-66-2	0.006	0.14
<input type="checkbox"/> Carbofuran phenol [6]	1563-38-8	0.056	1.4
<input type="checkbox"/> Carbon disulfide	75-15-0	3.8	4.8mg/l
<input type="checkbox"/> Carbon tetrachloride	56-23-5	0.057	6
<input type="checkbox"/> Carbosulfan [6]	55285-14-8	0.028	1.4
<input type="checkbox"/> Chlordane (alpha and gamma isomers)	57-74-9	0.0033	0.26
<input type="checkbox"/> Chlorobenzene	108-90-7	0.057	6
<input type="checkbox"/> Chlorobenzilate	510-15-6	0.1	NA
<input type="checkbox"/> Chlorodibromomethane	124-48-1	0.057	15
<input type="checkbox"/> Chloroethane	75-00-3	0.27	6
<input type="checkbox"/> Chloroform	67-66-3	0.046	6
<input type="checkbox"/> Chloromethane (Methyl chloride)	74-87-3	0.19	30
<input type="checkbox"/> Chrysene	218-01-9	0.059	3.4
<input type="checkbox"/> m-Cresol	108-39-4	0.77	5.6
<input type="checkbox"/> (difficult to distinguish from p-cresol)			
<input type="checkbox"/> m-Cumenyl methylcarbamate [6]	64-00-6	0.056	1.4

✓ I. Organic Constituents (continued)			
<input type="checkbox"/> cis-1,3-Dichloropropylene	10061-01-5	0.036	18
<input type="checkbox"/> Cyclohexanone	108-94-1	0.36	0.75 mg/l TCLP
<input type="checkbox"/> 1,1-Dichloroethane	75-34-3	0.059	6
<input type="checkbox"/> 1,1-Dichloroethylene	75-35-4	0.025	6
<input type="checkbox"/> 1,2-Dibromo-3-chloropropane	96-12-8	0.11	15
<input type="checkbox"/> 1,2-Dichloroethane	107-06-2	0.21	6
<input type="checkbox"/> trans-1,2-Dichloroethylene	156-60-5	0.054	30
<input type="checkbox"/> 1,2-Dichloropropane	78-87-5	0.85	18
<input type="checkbox"/> 1,2-Diphenylhydrazine	122-66-7	0.087	NA
<input type="checkbox"/> trans-1,3-Dichloropropylene	10061-02-6	0.036	18
<input type="checkbox"/> 1,4-Dinitrobenzene	100-25-4	0.32	2.3
<input type="checkbox"/> 1,4-Dioxane	123-91-1	12	170
<input type="checkbox"/> 2,4-Dichlorophenol	120-83-2	0.044	14
<input type="checkbox"/> 2,4-Dichlorophenoxyacetic acid/2,4-D	94-75-7	0.72	10
<input type="checkbox"/> 2,4-Dinitrophenol	51-28-5	0.12	160
<input type="checkbox"/> 2,4-Dinitrotoluene	121-14-2	0.32	140
<input type="checkbox"/> 2,6-Dichlorophenol	87-65-0	0.044	14
<input type="checkbox"/> 2,6-Dinitrotoluene	606-20-2	0.55	28
<input type="checkbox"/> 2,4-D (2,4-Dichlorophenoxyacetic acid)	94-75-7	0.72	10
<input type="checkbox"/> 2,4-Dimethyl phenol	105-67-9	0.036	14
<input type="checkbox"/> 2,4-Dimethylaniline (2,4-xylidine)	95-68-1	0.010	0.66
<input type="checkbox"/> 4,6-Dinitro-o-cresol	534-52-1	0.28	160
<input type="checkbox"/> delta-BHC	319-86-8	0.023	0.066
<input type="checkbox"/> di-n-butyl phthalate	84-74-2	0.057	28
<input type="checkbox"/> Di-n-octyl phthalate	117-84-0	0.017	28
<input type="checkbox"/> Di-n-propylnitrosamine	621-64-7	0.4	14
<input type="checkbox"/> Dibenz(a,e)pyrene	192-65-4	0.061	NA
<input type="checkbox"/> Dibenz(a,h)anthracene	53-70-3	0.055	8.2
<input type="checkbox"/> Dibromomethane	74-95-3	0.11	15
<input type="checkbox"/> Dichlorodifluoromethane	75-71-8	0.23	7.2
<input type="checkbox"/> Dieldrin	60-57-1	0.017	0.13
<input type="checkbox"/> Diethyl phthalate	84-66-2	0.2	28
<input type="checkbox"/> Dimethyl phthalate	131-11-3	0.047	28
<input type="checkbox"/> Diphenylamine	122-39-4	0.92	13
<input type="checkbox"/> Diphenylnitrosamine	86-30-6	0.92	13
<input type="checkbox"/> Disulfoton	298-04-4	0.017	6.2
<input type="checkbox"/> Dithiocarbamates (total) [6]	137-30-4	0.028	28
<input type="checkbox"/> Endosulfan I	959-98-8	0.023	0.066
<input type="checkbox"/> Endosulfan II	33213-65-9	0.029	0.13
<input type="checkbox"/> Endosulfan sulfate	1031-07-8	0.029	0.13
<input type="checkbox"/> Endrin	72-20-8	0.0028	0.13
<input type="checkbox"/> Endrin aldehyde	7421-93-4	0.025	0.13
<input type="checkbox"/> EPTC [6]	759-94-4	0.042	1.4
<input type="checkbox"/> Ethyl acetate	141-78-6	0.34	33
<input type="checkbox"/> Ethyl benzene	100-41-4	0.057	10
<input type="checkbox"/> Ethyl cyanide/propanenitrile	107-12-0	0.24	360
<input type="checkbox"/> Ethyl ether	60-29-7	0.12	160
<input type="checkbox"/> Ethyl methacrylate	97-63-2	0.14	160
<input type="checkbox"/> Ethyl Oxide	75-21-8	0.12	NA
<input type="checkbox"/> Ethylene dibromide (1,2-Dibromoethane)	106-93-4	0.028	15
<input type="checkbox"/> Famphur	52-85-7	0.017	15
<input type="checkbox"/> Fluoranthene	206-44-0	0.068	3.4

✓	Fluorene	86-73-7	0.059	3.4
	Formetanate hydrochloride [6]	23422-53-9	0.056	1.4
	gamma-BHC	58-89-9	0.0017	0.066
<input type="checkbox"/>	Heptachlor	76-44-8	0.0012	0.066
<input type="checkbox"/>	Heptachlor epoxide	1024-57-3	0.016	0.066
<input type="checkbox"/>	Hexachlorobenzene	118-74-1	0.055	10
<input type="checkbox"/>	Hexachlorobutadiene	87-68-3	0.055	5.6
<input type="checkbox"/>	Hexachlorocyclopentadiene	77-47-4	0.057	2.4
<input type="checkbox"/>	Hexachloroethane	67-72-1	0.055	30
<input type="checkbox"/>	Hexachloropropylene	1888-71-7	0.035	30
<input type="checkbox"/>	HxCDDs (All Hexachlorodibenzo-p-dioxins)	N/A	0.000063	0.001
<input type="checkbox"/>	HxCDFs (All Hexachlorodibenzofurans)	N/A	0.000063	0.001
<input type="checkbox"/>	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	35822-46-9	0.000035	0.0025
<input type="checkbox"/>	1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	0.000035	0.0025
<input type="checkbox"/>	1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	0.000035	0.0025
<input type="checkbox"/>	Ideno (1,2,3-c,d) pyrene	193-39-5	0.0055	3.4
<input type="checkbox"/>	Iodomethane	74-88-4	0.19	65
<input type="checkbox"/>	Isobutyl alcohol	78-83-1	5.6	170
<input type="checkbox"/>	Isodrin	465-73-6	0.021	0.066
<input type="checkbox"/>	Isosafrole	120-58-1	0.081	2.6
<input type="checkbox"/>	Kepone	143-50-0	0.0011	0.13
<input type="checkbox"/>	3-Methylcholanthrene	56-49-5	0.0055	15
<input type="checkbox"/>	4,4-Methylene bis (2-chloroaniline)	101-14-4	0.5	30
<input type="checkbox"/>	m-Dichlorobenzene	541-73-1	0.036	6
<input type="checkbox"/>	Methacrylonitrile	126-98-7	0.24	84
<input type="checkbox"/>	Methanol	67-56-1	5.6	0.75 mg/l TCLP
<input type="checkbox"/>	Methiocarb [6]	2032-65-7	0.056	1.4
<input type="checkbox"/>	Methomyl [6]	16752-77-5	0.028	0.14
<input type="checkbox"/>	Methoxychlor	72-43-5	0.25	0.18
<input type="checkbox"/>	Methapyrilene	91-80-5	0.081	1.5
<input type="checkbox"/>	Methyl ethyl ketone	78-93-3	0.28	36
<input type="checkbox"/>	Methyl isobutyl ketone	108-10-1	0.14	33
<input type="checkbox"/>	Methyl methacrylate	80-62-6	0.14	160
<input type="checkbox"/>	Methyl methansulfonate	66-27-3	0.018	NA
<input type="checkbox"/>	Methyl parathion	298-00-0	0.014	4.6
<input type="checkbox"/>	Methylene chloride	75-09-2	0.089	30
<input type="checkbox"/>	Metolcarb [6]	1129-41-5	0.056	1.4
<input type="checkbox"/>	Mexacarbate [6]	315-18-4	0.056	1.4
<input type="checkbox"/>	Molinate [6]	2212-67-1	0.042	1.4
<input type="checkbox"/>	2-Naphthylamine	91-59-8	0.52	NA
<input type="checkbox"/>	5-Nitro-o-toluidine	99-55-8	0.32	28
	n-Butyl alcohol	71-36-3	5.6	2.6
	N-Nitroso-di-n-butylamine	924-16-3	0.4	17
	N-Nitrosodiethylamine	55-18-5	0.4	28
	N-Nitrosodimethylamine	62-75-9	0.4	2.3
	N-Nitrosomethylethylamine	10595-95-6	0.4	2.3
	N-Nitrosomorpholine	59-89-2	0.4	2.3
	N-Nitrosopiperidine	100-75-4	0.013	35
	N-Nitrosopyrrolidine	930-55-2	0.013	35
	Naphthalene	91-20-3	0.059	5.6
	Nitrobenzene	98-95-3	0.068	14
	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	3268-87-9	0.000063	0.005

✓ I. Organic Constituents (continued)			
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	39001-02-0	0.000063	0.005
o,p-DDD	53-19-0	0.023	0.087
o,p-DDE	3424-82-6	0.031	0.087
o,p-DDT	789-02-6	0.0039	0.087
o-Cresol	95-48-7	0.11	5.6
o-Dichlorobenzene	95-50-1	0.088	6
o-Nitroaniline	88-74-4	0.27	14
o-Nitrophenol	88-75-5	0.028	13
Oxamyl [6]	23135-22-0	0.056	0.28
1,3-Phenylenediamine	108-45-2	0.010	0.66
p-Cresidine	120-71-8	0.010	0.66
p,p-DDD	72-54-8	0.023	0.087
p,p-DDE	72-55-9	0.031	0.087
p,p-DDT	50-29-3	0.0039	0.087
p-Chloro-m-cresol	59-50-7	0.018	14
p-Chloroaniline	106-47-8	0.46	16
p-Cresol	106-44-5	0.77	5.6
(difficult to distinguish from m-cresol)			
p-Dichlorobenzene	106-46-7	0.09	6
p-Dimethylaminoazobenzene	60-11-7	0.13	NA
p-Nitroaniline	100-01-6	0.028	28
p-Nitrophenol	100-02-7	0.12	29
Parathion	56-38-2	0.014	4.6
Pebulate [6]	1114-71-2	0.042	1.4
PeCDDs (All Pentachlorodibenzo-p-dioxins)	N/A	0.000063	0.001
PeCDFs (All Pentachlorodiebenzofurans)	N/A	0.000035	0.001
Pentachlorobenzene	608-93-5	0.055	10
Pentachloroethane	76-01-7	0.055	6
Pentachloronitrobenzene	82-68-8	0.055	4.8
Pentachlorophenol	87-86-5	0.089	7.4
Phenacetin	62-44-2	0.081	16
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Phorate	298-02-2	0.021	4.6
Phthalic acid	100-21-0	0.055	28
Phthalic anhydride	85-44-9	0.055	28
Physostigmine [6]	57-47-6	0.056	1.4
Physostigmine salicylate [6]	57-64-7	0.056	1.4
Promecarb [6]	2631-37-0	0.056	1.4
Pronamide	23950-58-5	0.093	1.5
Propham [6]	122-42-9	0.056	1.4
Propoxur [6]	114-26-1	0.056	1.4
Prosulfocarb [6]	52888-80-9	0.042	1.4
Pyrene	129-00-0	0.067	8.2
Pyridine	110-86-1	0.014	16
Safrole	94-59-7	0.081	22
Silvex (2,4,5-TP)	93-72-1	0.72	7.9
1,1,1,2-Tetrachloroethane	630-20-6	0.057	6
1,1,1-Trichloroethane	71-55-6	0.054	6
1,1,2,2-Tetrachloroethane	79-34-5	0.057	6
1,1,2-Trichloro-2,2,2-trifluoroethane	76-13-1	0.057	30
1,1,2-Trichloroethane	79-00-5	0.054	6

1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
1,2,4-Trichlorobenzene	120-82-1	0.055	19
1,2,3-Trichloropropane	96-18-4	0.85	30
2,3,4,6-Tetrachlorophenol	58-90-2	0.03	7.4
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	93-76-5	0.72	7.9
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4
TCDDs (All Tetrachlorodibenzo-p-dioxins)	N/A	0.000063	0.001
TCDFs (All Tetrachlorodiebenzofurans)	N/A	0.000063	0.001
Tetrachloroethylene	127-18-4	0.056	6
Thiodicarb [6]	59669-26-0	0.019	1.4
Thiophanate-methyl [6]	23564-05-8	0.056	1.4
Toluene	108-88-3	0.08	10
Total PCBs	1336-36-3	0.1	10
(sum of all PCB isomers, or all Aroclors)			
Toxaphene	8001-35-2	0.0095	2.6
Triallate [6]	2303-17-8	0.042	1.4
Trichloroethylene	79-01-6	0.054	6
Trichloromonofluoromethane	75-69-4	0.02	30
Triethylamine [6]	101-44-8	0.081	1.5
tris-(2,3-Dibromopropyl) phosphate	126-72-7	0.11	0.1
Vernolate [6]	1929-77-7	0.042	1.4
Vinyl chloride	75-01-4	0.27	6
Xylenes-mixed isomers	1330-20-7	0.32	30
(sum of o-, m-, and p-xylene concentrations)			

<b>II. Inorganic Constituents</b>			
<input type="checkbox"/>	Antimony	7440-36-0	1.9 * 1.15 mg/l TCLP
<input type="checkbox"/>	Arsenic	7440-38-2	1.4 * 5.0 mg/l TCLP
<input type="checkbox"/>	Barium	7440-39-3	1.2 * 21.0 mg/l TCLP
<input type="checkbox"/>	Beryllium	7440-41-7	0.82 * 1.22 mg/l TCLP
<input type="checkbox"/>	Cadmium	7440-43-9	0.69 * 0.11 mg/l TCLP
<input type="checkbox"/>	Chromium (Total)	7440-47-3	2.77 * 0.60 mg/l TCLP
<input type="checkbox"/>	Cyanides (Amenable) [4]	57-12-5	0.86 30
<input type="checkbox"/>	Cyanides (Total) [4]	57-12-5	1.2 590
<input type="checkbox"/>	Fluoride [5]	16984-48-8	35 NA
<input type="checkbox"/>	Lead	7439-92-1	0.69 * 0.75 mg/l TCLP
<input type="checkbox"/>	Mercury - All others	7439-97-6	0.15 * 0.025 mg/l TCLP
<input type="checkbox"/>	Mercury - Retort nonwastewater	7439-97-6	NA * 0.20 mg/l TCLP
<input type="checkbox"/>	Nickel	7440-02-0	3.98 * 11.0 mg/l TCLP
<input type="checkbox"/>	Selenium	7782-49-2	0.82 * 5.7 mg/l TCLP
<input type="checkbox"/>	Silver	7440-22-4	0.43 * 0.14 mg/l TCLP
<input type="checkbox"/>	Sulfide	18496-25-8	14 NA
<input type="checkbox"/>	Thallium	7440-28-0	1.4 * 0.2 mg/l TCLP
<input type="checkbox"/>	Vanadium [4]	7440-62-2	4.3 * 1.6 mg/l TCLP
<input type="checkbox"/>	Zinc [5]	7440-66-6	2.61 * 4.3 mg/l TCLP

I certify that the above is true and correct to the best of my knowledge.

\_\_\_\_\_  
Authorized Name (Print)

\_\_\_\_\_  
Title

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Date



CES ENVIRONMENTAL SERVICES USA Inc. – UHC FORM  
UNDERLYING HAZARDOUS CONSTITUENTS

Date: \_\_\_\_\_

Generator: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Profile No. \_\_\_\_\_

The waste stream represented by the above **Profile Number** is below all of the concentration limits as indicated on table 268.48 (attached), with the exception of the D002 characteristic code and the Sulfide (D003 characteristic code, sulfide) which is circled.

Certifying Representative:

- a. \_\_\_\_\_  
**Print Name**
- b. \_\_\_\_\_  
**Signature**
- c. \_\_\_\_\_  
**Company**
- d. \_\_\_\_\_  
**Title**

All of a, b, c, d must be completed.

<p style="text-align: center;"><b>ZaCh</b> S Y S T E M</p> <p>Chemical plant: <b>Via Dovaro</b> <b>Almisano di Lonigo (VI) - ITALY</b> <b>Phone +39/0444/433111</b> <b>Fax +39/0444/831192</b></p>	<b>(EEC) – MATERIAL SAFETY DATA SHEET</b> (in accordance with the Directive 91/155/CEE)	
	<b>Substance:</b> <p style="text-align: center;"><b>N-METHYL-PYRIMIDINONE</b></p> <p style="text-align: center;"><i>MSDS n° 460</i> <i>Ed. n° 2</i></p>	Compilation date: 24/10/2006 Updating date: 24/05/2007
	<b>Page 1</b>	Application: <input type="checkbox"/> Active pharmaceutical ingredient <input type="checkbox"/> Row material <input type="checkbox"/> Solvent <input type="checkbox"/> Intermediate <input type="checkbox"/> Catalyst <input checked="" type="checkbox"/> Finished product <input type="checkbox"/> Reagent

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1. Substance identification

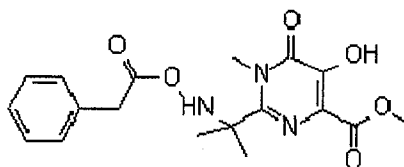
- 1.1.1. Chemical name : N – METHYL – PYRIMIDINONE
- 1.1.2. Common names and Synonyms :
- 1.1.3. Chemical Abstract Nomenclature :
- 1.1.4. Application :

### 1.2. Company identification

- 1.2.1. Company identification : ZaCh System S.p.A.  
Via Dovaro – Almisano di Lonigo (VI) - Italy  
Phone +39/0444/433111 – Fax +39/0444/831192
- 1.2.2. Emergency phone number : +39/335/7803994; +39/335/1221704

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

- 2.1. Number of CAS register :
- 2.2. ECC number :
- 2.3. Number of EINECS register :
- 2.4. Molecular formula :  $C_{18}H_{21}N_3O_6$



$C_{18}H_{21}N_3O_6$   
375.38

2.5. Structural formula :

2.6. Molecular weight : 375,38

<p style="text-align: center;"><b>ZaCh</b> S Y S T E M</p> <p>Chemical plant: <b>Via Dovaro</b> <b>Almisano di Lonigo (VI) - ITALY</b> <b>Phone +39/0444/433111</b> <b>Fax +39/0444/831192</b></p>	<b>(EEC) – MATERIAL SAFETY DATA SHEET</b> (in accordance with the Directive 91/155/CEE)	
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	Application: <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Row material  <input type="checkbox"/> Intermediate  <input checked="" type="checkbox"/> Finished product         </div> <div> <input type="checkbox"/> Active pharmaceutical ingredient  <input type="checkbox"/> Solvent  <input type="checkbox"/> Catalyst  <input type="checkbox"/> Reagent         </div> </div>	
<b>Page 2</b>		

### 3. HAZARD IDENTIFICATION


Handle with caution for chemical substance; the toxicological properties of this material have not been fully investigated

### 4. FIRST AID MEASURES

- 4.1. Ingestion : Wash out the mouth with copious ammount of water. Contact a physician.
- 4.2. Inhalation : Take the wounded outside from the hazardous area. Contact a physician.
- 4.3. Skin contact : Flush exposed area with large amounts of water
- 4.4. Eyes contact : Wash immediately with copions amount of water keeping eyelids wide open
- 4.5. Other information :

### 5. FIRE-FIGHTING MEASURES

- 5.1. Adequate extinguishing measures : Water, foam, chemical powder
- 5.2. Extinguishing measures to be avoided :
- 5.3. Dangerous from combustion products : It can emit toxic smocks of carbon monoxide and nitric oxides
- 5.4. Special protection equipment for fire extinguishing : Protective means suitable for the specific risk
- 5.5. Other information :

 <p>Chemical plant: Via Dovaro Almisano di Lonigo (VI) - ITALY Phone +39/0444/433111 Fax +39/0444/831192</p>	<b>(EEC) – MATERIAL SAFETY DATA SHEET</b> (in accordance with the Directive 91/155/CEE)	
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## 6. ACCIDENTAL RELEASE MEASURES

- 6.1. Absorbing and cleaning procedures : Collect with mechanical instruments; avoid raising dust. Place into suitable containers to send to disposal
- 6.2. People protection : Use gas-mask with P3 class powder filter, gloves and protective garments
- 6.3. Other suggestions : Avoid raising dust.

## 7. HANDLING AND STORAGE

- 7.1. Handling : Handle under aspiration. Avoid raising dust
- 7.2. Storage : Store containers closed in fresh and ventilated areas

## 8. INDIVIDUAL EXPOSURE/PROTECTION CONTROL

- 8.1. General information : Supply the manufacturing area with aspiration system
- 8.2. Hygiene measures : Use according to good handling rules. Do not eat or drink in the manufacturing area
- 8.3. Respiratory protection : Gas-mask with powder P3 filter.
- 8.4. Hand protection : Gloves
- 8.5. Skin protection : Protective garments
- 8.6. Eyes protection : Security gloves
- 8.7. Exposure limits
- 8.7.1. TLV/TWA (ACGIH, USA) :
- 8.7.2. TLV/CEILING (ACGIH, USA) :

Also if there is not TLV operators must use all suitable security measures to limit smokes release in atmosphere and use all necessary equipments during handling or in case of emergency intervention.

<p style="text-align: center;"><b>ZaCh</b> S Y S T E M</p> <p>Chemical plant: Via Dovaro Almisano di Lonigo (VI) - ITALY Phone +39/0444/433111 Fax +39/0444/831192</p>	<b>(EEC) – MATERIAL SAFETY DATA SHEET</b> (in accordance with the Directive 91/155/CEE)	
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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Aspect

- 9.1.1. Physical state : Solid, powder  
 9.1.2. Colour : White  
 9.1.3. Odour :

### 9.2. Important data for safety:

- |  |  |
|--|--|
| 9.2.1. Water solubility  | : Insoluble; soluble in basic water solution |
| 9.2.2. Solubility in main organic solvents                     | : Little soluble in acetone and methanol     |
| 9.2.3. Density   | :  |
| 9.2.4. Melting point   | :  |
| 9.2.5. Boiling point   | :  |
| 9.2.6. Flash point   | :  |
| 9.2.7. Lower and higher flash limit in air (% vol.)            | :  |
| 9.2.8. Autoignition temperature                                | :  |
| 9.2.9. Decomposition temperature                               | :  |
| 9.2.10. Vapour pressure  | :  |
| 9.2.11. pH valor   | :  |
| 9.2.12. Vapor density  | :  |
| 9.2.13. Octanol/water partition rate (log P)                   | :  |
| 9.2.14. Limiting oxygen concentration (LOC %v/v)               | :  |
| 9.2.15. MEC ( minimum explosive concentration)                 | :  |
| 9.2.16. MIE (minimum ignition energy)                          | :  |
| 9.2.17. MIT (minimum ignition temperature-dust cloud )         | :  |
| 9.2.18. LIT (minimum ignition temperature – powder in strate): | :  |
| 9.2.19. Dust explosion constant (Kst)                          | :  |
| 9.2.20. Powder class (ST)                                      | :  |
| 9.2.21. Estimated on set temperature of exothermic behaviour:  | :  |
| 9.2.22. Further information                                    | :  |

 <p>Chemical plant: Via Dovaro Almisano di Lonigo (VI) - ITALY Phone +39/0444/433111 Fax +39/0444/831192</p>	(EEC) – MATERIAL SAFETY DATA SHEET (in accordance with the Directive 91/155/CEE)	
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## 10. STABILITY AND REACTIVITY

- 10.1. Conditions to be avoided : n.a.
- 10.2. Materials to be avoided : n.a.
- 10.3. Dangerous decomposition products : n.a.
- 10.4. Other information :

## 11. TOXICOLOGICAL INFORMATION

### 11.1. Routes of entry:

- 11.1.1. Ingestion : Yes
- 11.1.2. Inhalation : Yes
- 11.1.3. Contact :

### 11.2. General information:

- 11.3. Acute toxicity:
- |   |        |
|---|--------|
| LD <sub>50</sub> (oral) [mg/kg]         | : n.a. |
| LD <sub>50</sub> (skin) [mg/kg]         | : n.a. |
| LC <sub>50</sub> (inhalation) [mg/l/4h] | : n.a. |

### 11.4. Other toxicity data:


### 11.5. Chronic toxicity:

- Carcinogenicity : n.a.
- Mutagenicity : n.a.
- Teratogenicity : n.a.

### 11.6. Corrosive/Irritant action:

- 11.6.1. Skin : n.a.
- 11.6.2. Eyes : n.a.
- 11.6.3. Mucous membrane : n.a.

### 11.7. Other information:

 <p>Chemical plant: Via Dovaro Almisano di Lonigo (VI) - ITALY Phone +39/0444/433111 Fax +39/0444/831192</p>	<b>(EEC) – MATERIAL SAFETY DATA SHEET</b> (in accordance with the Directive 91/155/CEE)	
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## 12. ECOLOGIC INFORMATION

**12.1. Ecotoxicity** : n.a

**12.1.1. Behavior inside purification system** (bacterial toxicity. Reproductive/respiratory inhibition): n.a

**12.2. Mobility** : n.a

**12.3. Persistence/degradability** : n.a

**12.4. Bioaccumulation potential** : n.a


**12.5. Other negative effects on environment** :

**12.6. Other ecological indications** :

## 13. DISPOSAL CONSIDERATIONS

Disolve or mix the product with a combustible solvent, then burn in a incinerator for chemical products equipped with afterburner and a scrubber.

Dispose in accordance with all regulations about environment protection.

 Chemical plant: <b>Via Dovaro</b> <b>Almisano di Lonigo (VI) - ITALY</b> <b>Phone +39/0444/433111</b> <b>Fax +39/0444/831192</b>	<b>(EEC) – MATERIAL SAFETY DATA SHEET</b> (in accordance with the Directive 91/155/CEE)	
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#### 14. TRANSPORT INFORMATION

**This substance is not considered hazardous according to International Transport Regulations**

Proper shipping name/description:

**14.1. Road and railway transport (RID/ADR):**

Class:      UN n. :      Classification code :      Label :

Packaging Group :

**14.2. Shipping transport (IMDG Code):**

Class :      UN.n. :      EmS :      Label :      M.POU.:

Packaging Group :

**14.3. Air transport (ICAO / IATA):**

Class :      UN.n.:      Label :

Packaging Group :

#### 15. REGULATORY INFORMATION

**15.1. Labeling in accordance with ECC Directive:**      1) legal      2) temporary      3) not required

**15.2. Hazard symbol** :

**15.3. R phrases** :


**15.4 S phrases** :

**15.5 Law references :**

**15.5.1** Medical checks of law: Periodic and prevent medical examinations according to physician and Italian regulations

**15.5.2** DPR 175/88 and following updatings :

**15.5.3** Compulsory insurance (table DPR 336/94 – Italian regulation-):

 <p>Chemical plant:  <b>Via Dovaro</b>  <b>Almisano di Lonigo (VI) - ITALY</b>  <b>Phone +39/0444/433111</b>  <b>Fax +39/0444/831192</b></p>	<b>(EEC) – MATERIAL SAFETY DATA SHEET</b> (in accordance with the Directive 91/155/CEE)	
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## 16. OTHER INFORMATION

### 16.1. Notes:

n.a. : Not available

### BILIOGRAPHY:

16.2. Other information :

16.3. Compiler :

16.4. Compilation date : 24/10/2006

16.5. Last updating date : 24/05/2007

16.6. Validity date : 24/05/2009

16.7. Printing date : 24/05/2007

16.8. Pages number : 8

16.9. Emergency phone number: +39/335/7803994; +39/335/1221704

Information supplied in this "Material Safety Data Sheet" is based on the best available information and our experience, and it is not exhaustive. It is applied on the product exactly as it is, in case of mixture or compound make sure that no new danger can rise.

**In any case people who handle the product must respect the current law and regulation related to the product, hygiene and security on work place.**

<p style="text-align: center;"><b>ZaCh</b> S Y S T E M</p> <p>Chemical plant:</p> <p>Via Dovaro Almisano di Lonigo (VI) - ITALY Phone +39/0444/433111 Fax +39/0444/831192</p>	<b>(EEC) – MATERIAL SAFETY DATA SHEET</b> (in accordance with the Directive 91/155/CEE)	
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## SUBSTANCE IDENTIFICATION

Common name: **N-METHYL-PYRIMIDINONE**

Molecular formula: **C<sub>18</sub> H<sub>21</sub> N<sub>3</sub> O<sub>6</sub>**

Use:

Approved DS .....

Date:

Approved Dir. R & D .....

Date:

Approved by Sic .....

Date:

# Material Safety Data Sheet

acc. to OSHA and ANSI

Printing date 12/20/2007

Reviewed on 01/19/2007

## 1 Identification of substance:

### Product details:

**Product name:** Dimethyl acetylenedicarboxylate

### Stock number:

A11437

L01143

### Manufacturer/Supplier:

Alfa Aesar, A Johnson Matthey Company  
Johnson Matthey Catalog Company, Inc.  
30 Bond Street

Ward Hill, MA 01835-8099

Emergency Phone: (978) 521-6300

CHEMTREC: (800) 424-9300

Web Site: www.alfa.com

**Information Department:** Health, Safety and Environmental Department

### Emergency information:

During normal hours the Health, Safety and Environmental Department.

After normal hours call Chemtrec at (800) 424-9300.

## 2 Composition/Data on components:

### Chemical characterization:

### Description: (CAS#)

Dimethyl acetylenedicarboxylate (CAS# 762-42-5); 100%

### Identification number(s):

EINECS Number: 212-098-4

## 3 Hazards identification

### Hazard description:



C Corrosive

### Information pertaining to particular dangers for man and environment

R 22 Harmful if swallowed.

R 34 Causes burns.

### Classification system

### HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

HEALTH	2
FIRE	1
REACTIVITY	1

Health (acute effects) = 2

Flammability = 1

Reactivity = 1

## 4 First aid measures

### General information

Immediately remove any clothing soiled by the product.

### After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm.

Seek immediate medical advice.

### After skin contact

Immediately wash with water and soap and rinse thoroughly.

(Contd. on page 2)

USA

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**Product name:** Dimethyl acetylenedicarboxylate

(Contd. of page 1)

Seek immediate medical advice.

**After eye contact**

Rinse opened eye for several minutes under running water. Then consult a doctor.

**After swallowing** Seek immediate medical advice.**5 Fire fighting measures****Suitable extinguishing agents**

Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**Special hazards caused by the material, its products of combustion or resulting gases:**

In case of fire, the following can be released:

Carbon monoxide and carbon dioxide

**Protective equipment:**

Wear self-contained respirator.

Wear fully protective impervious suit.

**6 Accidental release measures****Person-related safety precautions:**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

**Measures for environmental protection:**

Do not allow material to be released to the environment without proper governmental permits.

**Measures for cleaning/collecting:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

**Additional information:**

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

**7 Handling and storage****Handling****Information for safe handling:**

Keep container tightly sealed.

Store in cool, dry place in tightly closed containers.

Ensure good ventilation at the workplace.

**Information about protection against explosions and fires:**

Keep ignition sources away.

Protect against electrostatic charges.

**Storage****Requirements to be met by storerooms and receptacles:**

No special requirements.

**Information about storage in one common storage facility:**

Do not store together with oxidizing and acidic materials.

Store away from reducing agents.

Store away from strong bases.

(Contd. on page 3)

— USA —

**Material Safety Data Sheet**

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Printing date 12/20/2007

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**Product name:** Dimethyl acetylenedicarboxylate

(Contd. of page 2)

**Further information about storage conditions:**

Keep container tightly sealed.

Store in cool, dry conditions in well sealed containers.

**8 Exposure controls and personal protection****Additional information about design of technical systems:**

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

**Components with limit values that require monitoring at the workplace:**

Not required.

**Additional information:** No data**Personal protective equipment****General protective and hygienic measures**

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

**Breathing equipment:**

Use suitable respirator when high concentrations are present.

**Protection of hands:** Impervious gloves**Eye protection:**

Tightly sealed goggles

Full face protection

**Body protection:** Protective work clothing.**9 Physical and chemical properties:****General Information**

<b>Form:</b>	Liquid
<b>Color:</b>	Colorless
<b>Odor:</b>	Not determined

**Change in condition**

<b>Melting point/Melting range:</b>	Not determined
<b>Boiling point/Boiling range:</b>	95-98°C (203-208°F) (19mm Hg)
<b>Sublimation temperature / start:</b>	Not determined

<b>Flash point:</b>	86°C (187°F)
---------------------	--------------

<b>Ignition temperature:</b>	Not determined
------------------------------	----------------

<b>Decomposition temperature:</b>	Not determined
-----------------------------------	----------------

<b>Danger of explosion:</b>	Product does not present an explosion hazard.
-----------------------------	---

**Explosion limits:**

<b>Lower:</b>	Not determined
<b>Upper:</b>	Not determined

<b>Vapor pressure:</b>	Not determined
------------------------	----------------

<b>Density at 20°C (68°F):</b>	1.1564 g/cm <sup>3</sup>
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USA

(Contd. on page 4)

# Material Safety Data Sheet

acc. to OSHA and ANSI

Printing date 12/20/2007

Reviewed on 01/19/2007

Product name: Dimethyl acetylenedicarboxylate

(Contd. of page 3)

## 10 Stability and reactivity

### Thermal decomposition / conditions to be avoided:

Decomposition will not occur if used and stored according to specifications.

### Materials to be avoided:

Acids

Oxidizing agents

Reducing agents

Bases

**Dangerous reactions** No dangerous reactions known

**Dangerous products of decomposition:** Carbon monoxide and carbon dioxide

## 11 Toxicological information

### Acute toxicity:

#### LD/LC50 values that are relevant for classification:

Oral	LD50	550 mg/kg (mus)
	LDLo	50 mg/kg (rat)

### Primary irritant effect:

#### on the skin:

Corrosive effect on skin and mucous membranes.

Irritant to skin and mucous membranes.

#### on the eye:

Strong corrosive effect.

Lachrymatory effect.

**Sensitization:** No sensitizing effects known.

### Subacute to chronic toxicity:

#### Subacute to chronic toxicity:

Dimethyl acetylenedicarboxylate is a poisonous, corrosive liquid. Fumes are irritating and lachrymatory. Ingestion causes somnolence, ataxia, and coma.

#### Subacute to chronic toxicity:

Corrosive materials are acutely destructive to the respiratory tract, eyes, skin and digestive tract. Eye contact may result in permanent damage and complete vision loss. Inhalation may result in respiratory effects such as inflammation, edema, and chemical pneumonitis. May cause coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting. Ingestion may cause damage to the mouth, throat and esophagus. May cause skin burns or irritation depending on the severity of the exposure.

### Additional toxicological information:

Swallowing will lead to a strong corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach.

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

## 12 Ecological information:

### General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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USA

# Material Safety Data Sheet

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Printing date 12/20/2007

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Product name: Dimethyl acetylenedicarboxylate

(Contd. of page 4)

Do not allow material to be released to the environment without proper governmental permits.

## 13 Disposal considerations

Product:

Recommendation

Consult state, local or national regulations to ensure proper disposal.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

## 14 Transport information

DOT regulations:



Hazard class:

8

Identification number:

UN1760

Packing group:

III

Proper shipping name (technical name):

CORROSIVE LIQUID, N.O.S. (Dimethyl acetylenedicarboxylate)

Label

8

Land transport ADR/RID (cross-border)



ADR/RID class:

8 (C9) Corrosive substances

Danger code (Kemler):

80

UN-Number:

1760

Packaging group:

III

Description of goods:

1760 CORROSIVE LIQUID, N.O.S. (Dimethyl acetylenedicarboxylate)

Maritime transport IMDG:



IMDG Class:

8

UN Number:

1760

Label

8

Packaging group:

III

Proper shipping name:

CORROSIVE LIQUID, N.O.S. (Dimethyl acetylenedicarboxylate)

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USA

**Material Safety Data Sheet**

acc. to OSHA and ANSI

Printing date 12/20/2007

Reviewed on 01/19/2007

**Product name:** Dimethyl acetylenedicarboxylate

(Contd. of page 5)

**Air transport ICAO-TI and IATA-DGR:**

<b>ICAO/IATA Class:</b>	8
<b>UN/ID Number:</b>	1760
<b>Label</b>	8
<b>Packaging group:</b>	III
<b>Proper shipping name:</b>	CORROSIVE LIQUID, N.O.S. (Dimethyl acetylenedicarboxylate)

**15 Regulations****Product related hazard informations:****Hazard symbols:**

C Corrosive

**Risk phrases:**

22 Harmful if swallowed.

34 Causes burns.

**Safety phrases:**

20 When using do not eat or drink.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

45 In case of accident or if you feel unwell, seek medical advice immediately.

60 This material and its container must be disposed of as hazardous waste.

**National regulations**

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

All components of this product are listed on the Canadian Non-Domestic Substances List (NDSL).

**Information about limitation of use:**

For use only by technically qualified individuals.

**16 Other information:**

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

**Department issuing MSDS:** Health, Safety and Environmental Department.

**Contact:** Paul V. Connolly

USA

2881

NOV Drilling Equipment (West Little York)



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/9/2008

Dear Ed Joye

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2881

**Expiration Date** 7/9/2010

**Generator:** NOV Drilling Equipment (West Little York)

**Address:** 12950 W. Little York  
Houston, TX 77041

### Waste Information

**Name of Waste:** Bead blast steel shot

**TCEQ Waste Code #:** 00543192

**Container Type:**

**Detailed Description of Process Generating Waste:**

Metal finishing and preparation process

**Color:** grey

**Odor:** none

**pH:** neutral

**Physical State:**

**Incompatibilities:** oxidizers

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

SRP



4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>  
TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

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**SECTION 1: Generator Information**Company: Nov Drilling Equipment (West Little York)Address: 12950 West Little YorkCity: Houston State: Texas Zip: 77041Contact: Ed Joya Title: \_\_\_\_\_Phone Number: 832.655.3849 Fax Number: 713-937-550724/hr Phone Number: 713.676.1460US EPA ID No: TXI490014180

State ID No: \_\_\_\_\_ SIC Code: \_\_\_\_\_

**SECTION 2: Billing Information - ☒ Same as Above**

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Contact: \_\_\_\_\_ Title: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_

**SECTION 3: General Description of the Waste**Name of Waste: Bead blast steel shot

Detailed Description of Process Generating Waste: \_\_\_\_\_

Metal finishing and preparation process

Physical State: ☐ Liquid ☐ Sludge ☐ Powder  
☒ Solid ☐ Filter Cake ☐ Combination

Color: grey Odor: noneSpecific Gravity (water=1): 2 Density: 16 lbs/galDoes this material contain any total phenolic compounds? ☐ Yes ☒ NoDoes this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No  
Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phaseContainer Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)Frequency: ☐ Weekly ☒ Monthly ☐ Yearly ☐ One-TimeQuantity: 5



**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.  
standard

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. analytical

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

Oxidizers

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals:

TCLP Volatiles:

TCLP Semi-Volatiles:

Reactivity:

Corrosivity:

Ignitability:

x

x

x

x

x

x

**SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)**

Is this material a wastewater or wastewater sludge?

☐ YES

☒ NO

If "Yes", complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

Robert E. Langford

7-9-08

CES Profile # 2881

**Mercury Environmental Services, Inc.**

6913 HWY 225, Deer Park, TX 77536

Phone: (281)-476-4534 Fax: (281)-476-4406

CES Environmental Services  
4904 Griggs Rd  
Houston, TX 77021

Phone: 7134175737  
Fax: (713) 676-1676

Attn: Gary Brauckman

**- CERTIFICATE OF RESULTS -**

MES Lab#: 8060048

Client Sample ID: Bead Blast Steel Shot

Extended ID: New Wly / PO#0608-08

Sample Collect Date: 6/2/2008 @ 5:00:00 PM

Sample Type: Comp

Sample Receipt Date: 6/3/2008 @ 1:20:00 PM

**Test Group / Method**

TCLP Metals (11) Method: SW-846 6010B					Analyst: JA Date / Time	
MDL	RL	Result	Units			
Antimony	0.032	1	< 0.032	mg/L	6/9/2008 /	11:23 AM
Arsenic	0.014	5	< 0.014	mg/L	6/9/2008 /	11:23 AM
Barium	0.0005	100	0.835	mg/L	6/9/2008 /	11:23 AM
Beryllium	0.0005	0.08	< 0.0005	mg/L	6/9/2008 /	11:23 AM
Cadmium	0.002	1	0.031	mg/L	6/9/2008 /	11:23 AM
Chromium	0.002	5	< 0.002	mg/L	6/9/2008 /	11:23 AM
Lead	0.006	5	0.022	mg/L	6/9/2008 /	11:23 AM
Nickel	0.003	70	0.182	mg/L	6/9/2008 /	11:23 AM
Selenium	0.024	1	< 0.024	mg/L	6/9/2008 /	11:23 AM
Silver	0.002	5	< 0.002	mg/L	6/9/2008 /	11:23 AM
TCLP Mercury Method: SW-846 7470A					Analyst: JA Date / Time	
MDL	RL	Result	Units			
Mercury	0.0002	0.2	< 0.0002	mg/L	6/5/2008 /	12:16 PM
Total Petroleum Hydrocarbons Solid Method: TNRCC 1005					Analyst: TFR Date / Time	
MDL		Result	Units			
C6 - C12 Hydrocarbons	4	< 4	mg/kg		6/5/2008 /	9:55 PM
>C12 - C28 Hydrocarbons	8	67	mg/kg		6/5/2008 /	9:55 PM
>C28 - C36 Hydrocarbons	8	< 8	mg/kg		6/5/2008 /	9:55 PM
Total TPH	20	67	mg/kg		6/5/2008 /	9:55 PM

Flags: H: Exceeds "High Limit" L: Below "Low Limit" RL: regulatory limit

Thursday, June 19, 2008

John Keller, Ph.D., Lab Director

Date

Report Date: 19-Jun-08

Page 1 of 1

8060048

**MERCURY ENVIRONMENTAL SERVICES  
QA/QC REPORT**

ANALYTES	METHOD TPH1005	MB mg/kg	CCV %REC	MS %REC	MSD %REC
C6-C12		< 4	105.2	97.0	113.4
C12-C28		< 8	107.4	98.4	114.6

ANALYTE	MB mg/L	LCS %REC	LCSD %REC	RPD	CCB mg/L	CCV %REC	LOW CHECK STD	ICS %REC
Antimony	< 0.032	103.8	98.8	4.89	< 0.032	96.5	118.0	96.4
Arsenic	< 0.005	100.3	91.9	8.72	< 0.005	98.3	106.0	90.4
Barium	< 0.002	101.0	97.6	3.48	< 0.002	92.6	92.4	86.1
Beryllium	< 0.002	90.9	96.9	5.36	< 0.002	92.6	93.6	93.5
Cadmium	< 0.001	95.3	91.9	3.58	< 0.001	88.1	91.8	83.4
Chromium	< 0.001	106.5	107.8	1.21	< 0.001	92.9	96.4	90.7
Lead	< 0.002	97.4	98.3	0.95	< 0.002	93.0	93.9	82.3
Mercury	< 0.0002	101.0	97.5	3.53	< 0.0002	102.0	100.0	
Nickel	< 0.001	103.0	104.0	0.97	< 0.001	94.3	95.2	85.3
Selenium	< 0.024	104.0	93.5	10.69	< 0.024	98.3	97.8	94.1
Silver	< 0.001	101.4	97.8	3.61	< 0.001	97.2	98.0	90.6

## Key to QA Abbreviations

MS=Matrix Spike

RPD=Relative Percent Deviation

LCS=Laboratory Control Standard

CCB=Continuing Calibration Blank

MDL=Minimum Detection Limit

MSD=Matrix Spike Duplicate

MB=Method Blank

CCV=Continuing Calibration Verification

%Rec=Percent Recovery

RL=Regulatory Limit

Signature:

John Keller / Laboratory Director

June 19, 2008

Mercury Environmental Services, Inc.

Request Lab To Dispose Of AB Sample Remains  
(Signature) *[Signature]* (Date) 6-2-08

**WHITE - Returned with Report**



**CES Environmental  
Services, Inc.**

**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**1. Base Pricing (including freight):**

\$50/drum TRANS \$70/hr + FSC

**2. Contamination Limit (maximum limit before surcharges apply):**

No Liquids

**3. Surcharge Pricing:**

**4. Special Testing Requirements:**

**5. Treatment and Handling Protocol:**

GLASS 2 Solid

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A    ☐ Subcategory B    ☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**7. Tests for Product Recovered/Recycled (if applicable):**

--

**8. Management for Product Recovered/Recycled (if applicable)**

--

2883

Inter Chem Inc.



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/10/2008

Dear Andre Corley/Mike Savoy

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2883

**Expiration Date** 7/10/2010

**Generator:** InterChem Inc.

**Address:** 1502 Fort Worth Street  
Liberty, TX 77575

### Waste Information

**Name of Waste:** Nonhazardous wastewater

**TCEQ Waste Code #:** CESQ1191

**Container Type:**

**Detailed Description of Process Generating Waste:**

Rain water in containments with trace amounts of IPA and foamer intermediate. Residue from containments after a hard rain in Tank 118.

**Color:** clear

**Odor:** very slight amine

**pH:** 6-9

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**

level d

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

LRP



**CES Environmental  
Services, Inc.**

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
http://www.cesenvironmental.com  
TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

**SECTION 1: Material Producer Information**

Company: InterChem Inc.  
Address: 1502 Fort Worth Street  
City, State, Zip: Liberty, TX 77575  
Contact: Mike Savoy-One Source Title: Agent for InterChem  
Phone No: 281-838-5093 Fax No: 936-336-5779  
24/hr Phone: 281-838-5093  
U.S. EPA I.D. No: TXCESQG  
State I.D. CESQG SIC Code:

**SECTION 2: Billing Information – ☐ Same as Above**

Company: One Source Industrial  
Address: 5006 Railroad Ave.  
City, State, Zip: Deer Park, TX 77536  
Contact: Mike Savoy Title: Agent for InterChem  
Phone No: 281-838-5093 Fax No: 281-479-9699

**SECTION 3: General Description of the Material / Product**

Name of Material / Product: Non Hazardous Waste Water

Detailed Description of Process Generating or Producing the Material / Product: Rain water in containments with trace amounts of IPA and foamer intermediate. Residues from containments after a hard rain. T, 18

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: Clear

Odor: Very, Slight Amine

Specific Gravity (water=1): 9-1

Density: 8.3 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)  
Container Size: \_\_\_\_\_ 5000 \_\_\_\_\_

Frequency: ☐ Weekly ☒ Monthly ☐ Quarterly ☐ Yearly  
Number of Units (containers): 1 Other: \_\_\_\_\_

Proper U.S. DOT Shipping Name:

CESQ 1191  
Non-RCRA

Class: Na

UN/NA:

Na

PG: Na

RQ: Na

JUL-10-2008 11:27

CES ENVIROMENTAL

7137488664

P.002

Flash Point >200	pH 8-9	N/A	N/A	7137488664 Solids	%
Oil & Grease Nmg/l	TOC 2-3000mg/l	Zinc mg/l	Copper mg/l	Nickel mg/l	

**SECTION 4: Physical and Chemical Data**

COMPONENTS	Concentration	Units
The material / product consists of the following materials	Ranges are acceptable	or %
Rain Water	99-99.8	%
IPA	.1-.2	%
Foamer Intermediate	.1-.2	%

**SECTION 5: Safety Related Data**

If the handling of this material / product requires the use of special protective equipment, please explain.

Level D PPE

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.

In House Analysis, MSDS sheets, generator knowledge

**SECTION 7: Incompatibilities**

Please list all incompatibilities (if any):

None

**SECTION 8: Material Producer's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☒ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: 

Date: 07/10/08

Printed Name/Title: Robert D. May**CES USE ONLY (DO NOT WRITE IN THIS SPACE)**Technical Manager: 

Date: 7-10-08

Approved

Rejected

Approval Number: 2883

**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

.12/gal <5000 TOC, <6 zinc

**2. Contamination Limits (maximum limit before surcharges apply):**

Zinc >8 PPM, TOC >5000-Call Dan Bowman-713-854-6150  
Call if Amine smell is more than very slight

**3. Surcharge Pricing:**

Case by Case from Sales rep

**4. Special Testing Requirements:**

TOC, Zinc, Flash, PH

**5. Treatment and Handling Protocol:**

Waste water treatment

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☒ Subcategory B

☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**7. Tests for Product Recovered/Recycled (if applicable):**

Na
----

**8. Management for Product Recovered/Recycled (if applicable):**

Na
----



4904 Griggs Road  
Houston, TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1676

To: Dan Bowman  
Cc: Kelli Lofton, Gary Peterson, Prabhaker

Date: 07/07/08

From: Miles Root

Lab Memo: 08-123

Subject: **One Source Evaluations 0708-14 & 15**

Two samples of waste water from One Source, Liberty, TX have been evaluated for potential processing at CES. These samples are evaluations 0708-14 & 15, and are waters cleaned from a spill of drilling additives mixed with rain water. Overall, both samples are potentially acceptable for processing at CES. High amines may be an issue when treated and discharged and both streams are slightly elevated in zinc.

Evaluation 0708-14 is from tank 116. This sample has an odor of amines. Hydrogen peroxide will not remove this odor. This sample has a flash point greater than 140 deg F, a pH of 8 and only 1 ppm phenol. There are no oils and only a trace of solids. The water treats with some difficulty and is slow to phase separate. When it does, the water is murky and not clear as it should be. The TOC on the treated water is high enough to warrant a surcharge at 9700 ppm and the zinc is approximately 7.3 ppm. The amine odor may be an issue for the city discharge and needs to be considered.

Evaluation 0708-15 is tank 118. This sample also has an odor of amines. Hydrogen peroxide will not remove this odor. This sample has a flash point greater than 140 deg F, a pH of 9 and only 1 ppm phenol. There are no oils or solids. This water also treats with some difficulty and is slow to phase separate. The separated water is close to clear in appearance. The TOC is an acceptable 2963 ppm and the zinc concentration is a slightly elevated 5.9 ppm. The amine odor may be an issue for the city discharge and needs to be considered.

The table below summarizes the analytical testing on these samples.

One Source Evals 0708-14 & 15		
	0708-14	0708-15
	T-116	T-118
Neat		
Oil, vol%	0	0
Solids, vol%	Trace	0
Flash Point, deg F	>140	>140
pH	8	9
phenols, ppm	1	1
Treated		
TOC, ppm	9700	2963
Metals, ppm		
Cd	0.236	0.182
Cr	0.918	0.218
Cu	0.78	0.274
Ni	1.945	1.746
Zn	7.3	5.9

# MATERIAL SAFETY DATA SHEET

MSDS NUMBER: 1842  
 PART NUMBER: INC 1842  
 PRODUCT NAME: INC 1842 Feaper Intermediate  
 CAS NUMBER: - 0  
 CHEMICAL NAME: Mixture of Surfactants

## SECTION I

MANUFACTURER: / VENDOR: InterChem, Inc.

ADDRESS: 3801 Markins Ave.  
 Odessa, TX 79764-6532

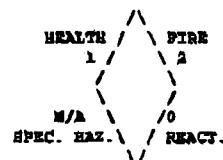
EMERGENCY TELEPHONE NUMBER: (800)424-9300

INFORMATION TELEPHONE NUMBER: (432)550-7027

DATE PREPARED: 09/26/06

## HAZARD RATINGS:

HEALTH: 1  
 FIRE: 2  
 REACTIVITY: 0  
 PERSONAL PROTECTION: X



## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

CAS NUMBER	HAZARDOUS COMPONENT	MTS	YARC	PART/Z	SUB- 313	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED PERCENT
67-63-0	Isopropanol	N	3	Y	N	400 ppm	200 ppm	Proprietary

## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT	NI	SPECIFIC GRAVITY (H2O = 1)	1.04300
VAPOR PRESSURE (mm Hg.)	NI	MELTING POINT	NI
VAPOR DENSITY (AIR = 1)	NI	EVAPORATION RATE (Butyl Acetate = 1)	NI

SOLUBILITY IN WATER: Soluble at 77°F

APPEARANCE AND ODOR: Dark Amber Liquid, bland odor

OTHER INFORMATION:  
 Viscosity Units = NI pH = >7.0  
 Freezing Point = 15°F Dry Point = NI

Density (lb./gal.) = 8.703

## DANGER

Physical Hazards:-  
 Flammable Liquid

Generic Name:- Mixture of Surfactants

UN/NA Number:- UN 1993

North American Emergency Response Number:- 128

DOT Proper Shipping Name:- FLAMMABLE Liquid, n.o.s.  
 (Contains Isopropanol)

DOT Hazard Class:- 3

DOT Packing Group:- III

DOT/CERCLA EQ:- N/APP.

This product does not contain any chemicals subject to the reporting requirements of Section 311 of Title III of the Superfund Amendments and Reauthorization Act of 1986.

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 105°F	FLAMMABLE LIMITS: LEL: NI UEL: NI
--------------------	-----------------------------------

## EXTINGUISHING MEDIA:

Dry Chemical  
 CO2  
 Water Spray  
 Water Fog

SECTION IV - FIRE AND EXPLOSION HAZARD DATA (Continued)

SPECIAL FIRE FIGHTING PROCEDURES:

Do not enter fire area without proper protection - see section V - decomposition products possible.

Fight fire from safe distance / protected location.

Heat may build pressure / rupture closed containers, spreading fire, increasing risk of burns / injuries.

May become combustible upon loss of aqueous carrier.

Use water spray / fog for cooling.

Notify authorities if liquid enters sewer / public waters.

UNUSUAL FIRE FIGHTING PROCEDURES:

While not normally combustible, if water content is lost (as in a fire), material may release flammable vapors if exposed to high temperature. When mixed with air and exposed to ignition source, vapors can burn in open or explode if confined. Vapors may be heavier than air, may travel long distances along ground before igniting / flashing back to vapor source.

SECTION V - REACTIVITY DATA

STABILITY:

Stable under normal conditions.

INCOMPATIBILITY (MATERIALS TO AVOID):

Strong Oxidizing agents, such as Hydrogen Peroxide, Bromine, and Chromic Acid.

Strong Acids.

Strong Alkalies.

Heat, sparks, open flames, and elevated temperatures.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS:

Incomplete combustion may release poisonous carbon monoxide and oxides and/or compounds of nitrogen and sulfur.

HAZARDOUS POLYMERIZATION:

Not expected to occur.

SECTION VI - HEALTH HAZARD DATA

ROUTE(S) OF ENTRY:

Inhalation:-

This material is expected to be an inhalation hazard.

Eye contact:- Primary Route

This material is expected to cause eye irritation.

Skin absorption:-

Penetrates skin readily.

Skin irritation:-

This material is expected to be a skin irritant.

Ingestion:-

This material is moderately toxic by ingestion.

HEALTH HAZARDS (ACUTE AND CHRONIC):

Acute Health Effects:- (Short Term)

Irritant to Eyes.

Irritant to Skin.

Moderate Ingestion Hazard.

Irritant to nasal mucosae.

Readily absorbed through the skin.

SIGNS AND SYMPTOMS OF EXPOSURE:

Skin Contact:-

Penetrates skin readily. Frequent or widespread contact may result in the absorption of potentially harmful amounts. Signs and symptoms of toxicity are similar to those of swallowing. Irritation or redness of the skin may develop after exposure.

Eye Contact:-

Moderate eye irritation may develop on exposure. Possible corneal injury.

Ingestion:-

Severe irritation and burning of the linings of the mouth, throat, and stomach may develop. Moderately toxic. May cause headache, dizziness, incoordination, nausea, vomiting, diarrhea, and general weakness. Ingestion may cause red blood cell hemolysis and possible liver and kidney injury.

SECTION VI - HEALTH HAZARD DATA (Continued)

Inhalation:-

Coughing and shortness of breath may result. More severe symptoms are also possible. High concentrations are irritating to the eyes and respiratory tract. May cause headache, dizziness, nausea, vomiting, and malaise.

Effects of repeated overexposure:-

Repeated overexposure may cause hemolysis of the red blood cells leading to possible liver and kidney damage.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

This material or its emissions may affect the central nervous system and/or aggravate pre-existing disorders. Prolonged observation may be indicated.

EMERGENCY AND FIRST AID PROCEDURES:

Inhalation:-

If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain emergency medical attention. Prompt action is essential.

Eye Contact:-

In case of eye contact, immediately rinse with clean water for 20 to 30 minutes. Retract both eyelids often. Obtain emergency medical attention.

Skin Contact:-

Immediately remove contaminated clothing. Wash skin thoroughly with mild soap and water. Flush with lukewarm water for 15 minutes. If sticky, use waterless cleanser first. Obtain emergency medical attention.

Ingestion:-

If large quantity swallowed, give lukewarm water (pint) if victim is completely conscious and alert. Do not induce vomiting, as risk of damage to lungs exceeds poisoning risk. Obtain emergency medical attention. Gastric lavage recommended.

Emergency Medical Treatment Procedures:-

Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Continue to rinse eyes with clean water for 20 to 30 minutes, retracting eyelids often. Contact ophthalmologist immediately.

Treat burns or allergic reactions conventionally after decontamination. Do not induce vomiting. Gastric lavage recommended.

OTHER HEALTH WARNINGS:

The toxicological and carcinogenic properties of this material have not been fully investigated. Handle accordingly, avoiding contact.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Equip responders with proper protection (see section VIII). **SMALL SPILL:-** Absorb liquid on paper, vermiculite, floor absorbent, or other absorbent material, and transfer to hood.

**LARGE SPILL:-** Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into containers.

Prevent run-off into sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

WASTE DISPOSAL METHOD:

Comply with Federal / State / Local regulations for disposal. Contact state and federal regulators to determine whether the material should be classified as a hazardous waste or industrial waste and handled accordingly. Use licensed transporter and disposal facility.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

For transport, handling, and storage, use polyethylene, plastic, lined steel or stainless steel.

Store in tightly closed containers in cool, dry, isolated and well ventilated area away from heat, sources of ignition and incompatible materials. Use non-sparking tools and explosion proof equipment. Ground lines, containers, and other equipment used during product transfer to reduce the possibility of a static induced spark. Do not "switch" load (load into containers which previously contained gasoline or other low flash material) because of possible accumulation of a static charge resulting in a source of ignition.

Use good personal hygiene practices.

Containers of this material may be hazardous when emptied, since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed.

Store drums with bungs in up position.

OTHER PRECAUTIONS:

Wash Thoroughly after handling.

Do not get it eyes, on skin, or clothing.

Do not breathe dust, vapor, mist, or gas.

Keep Container closed when not in use.

Empty container may contain hazardous residues.

SECTION VIII - CONTROL MEASURES

VENTILATION REQUIREMENTS:

Either local exhaust or general room ventilation is usually required.

PERSONAL PROTECTIVE EQUIPMENT:

Respiratory Protection:-

If exposure can exceed the PEL/TLV, use only NIOSH/MSHA approved air-purifying or supplied air respirator operated in a positive pressure mode per the NIOSH/MSHA 1961 Occupational Health Guidelines for chemical hazard.

Eye Protection:-

Eye protection, including both chemical splash goggles and face shield, must be worn when possibility exists for eye contact due to spraying liquid or airborne particles. Contact lenses must not be worn.

Skin Protection:-

Impervious protective suit with gloves, boots, and full head and face protection must be worn. The equipment must be cleaned thoroughly after each use.

Other Hygienic Practices:-

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet facilities. Shower after work using plenty of soap and water.

Other Work Practices:-

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Promptly remove soiled clothing / wash thoroughly before reuse.

SECTION IX - ADDITIONAL INFORMATION

ADDITIONAL MANUFACTURER WARNINGS:

- For industrial use only.
- Keep out of reach of children.
- Failure to use caution may cause serious injury or illness.
- Never siphon by mouth.

OTHER PRECAUTIONS AND COMMENTS:

Disclaimers:-

Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness.

The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of, or in any way connected with the handling, storage, use, or disposal of the product.

This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

This MSDS has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1200).

# MATERIAL SAFETY DATA SHEET

MSDS NUMBER: 1480  
 PART NUMBER: INC 1480  
 PRODUCT NAME: INC 1480 Corrosion Inhibitor Intermediate  
 CAS NUMBER: 61790-69-0  
 CHEMICAL NAME: Alkyl Imidazoline

## SECTION I

MANUFACTURED / VENDOR: Interchem, Inc.

ADDRESS: P.O. Box 13166  
 Odessa, TX 79768-3166

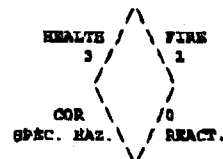
EMERGENCY TELEPHONE NUMBER: (800)424-9300

INFORMATION TELEPHONE NUMBER: (432)550-7027

DATE PREPARED: 06/27/00

### HMIS RATINGS:

HEALTH: 3  
 FIRE: 1  
 REACTIVITY: 0  
 PERSONAL PROTECTION: C



## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

CAS NUMBER	HAZARDOUS COMPONENT	WTP	IAAC	PART/S	313	OSHA PEL	ACGIH TLV	OTHER LIMITS
61790-69-0	Alkyl Imidazoline	N	N	N	N	NI	NI	Proprietary

## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT	N/App.	SPECIFIC GRAVITY (H2O = 1)	0.94000
VAPOR PRESSURE (mm Hg.)	NI	MELTING POINT	NI
VAPOR DENSITY (AIR = 1)	>1	EVAPORATION RATE (Butyl Acetate = 1)	<1

SOLUBILITY IN WATER: Dispersible

APPEARANCE AND ODOR: Dark-brown liquid; Fishy, Amine-Like Odor

### OTHER INFORMATION:

Viscosity Units = NI pH = NI  
 Freezing Point = NI Dry Point = NI

Density (Lb./Gal.) = 7.838

### Emergency Overview:

#### WARNING:

Harmful if swallowed, inhaled, or absorbed through the skin.  
 Avoid contact with skin, eyes, or clothing.  
 Wash thoroughly after handling.

Generic Name: Alkyl Imidazoline

UN/NA Number: UN 1760

North American Emergency Response Number: 154

DOT Proper Shipping Name: Corrosive liquid, n.o.s.  
 (Fatty Amidoamines)

DOT Hazard Class: 8

DOT Packing Group: III

DOT/CHERLA RQ: N/App.

All components are listed on the TSCA Inventory. Exempt from listing are any byproducts and/or impurities in the product.

This product does not contain any chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986.

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 320°F (COC)

FLAMMABLE LIMITS: LEL: NI

UEL: NI

EXTINGUISHING MEDIA:

SECTION IV - FIRE AND EXPLOSION HAZARD DATA (Continued)

Use an extinguishing agent suitable for the surrounding fire.

SPECIAL FIRE FIGHTING PROCEDURES:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

UNUSUAL FIRE FIGHTING PROCEDURES:

Emits acrid smoke and irritating fumes when heated to decomposition. These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2, etc.).

SECTION V - REACTIVITY DATA

STABILITY:

This product is stable.

INCOMPATIBILITY (MATERIALS TO AVOID):

Reactive or incompatible with the following materials: oxidizing materials and reducing materials.

Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS:

None.

HAZARDOUS POLYMERIZATION:

Will not occur.

SECTION VI - HEALTH HAZARD DATA

ROUTE(S) OF ENTRY:

Dermal contact  
Eye contact  
Inhalation  
Ingestion

HEALTH HAZARDS (ACUTE AND CHRONIC):

Eyes:-  
Corrosive to eyes.

Skin:-  
Corrosive to skin.

Ingestion:-  
May cause burns to mouth, throat and stomach.

Inhalation:-  
May cause sensitization by inhalation.

Target Organ Effects:-  
Contains material which causes damage to the following organs: upper respiratory tract, skin, eye, lens or cornea.

SIGNS AND SYMPTOMS OF EXPOSURE:

Skin Contact:-  
Irritation or redness of the skin may develop after exposure.

Eye Contact:-  
Moderate eye irritation may develop on exposure.

Ingestion:-  
Severe irritation and burning of the lining of the mouth, throat, and stomach may develop.

Inhalation:-  
Coughing and shortness of breath may result. More severe symptoms are also possible.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

Repeated skin exposure can produce local skin destruction or dermatitis. Repeated or prolonged contact with spray or mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to the substance can produce target organ damage.

EMERGENCY AND FIRST AID PROCEDURES:

Eyes:-  
Get medical attention immediately. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Chemical burns must be treated promptly by a physician.

Skin:-

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SECTION VI - HEALTH HAZARD DATA (Continued)

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Get medical attention immediately. Flush contaminated skin with plenty of water. Continue to rinse for at least 10 minutes. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing or wear gloves. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion:-**

Get medical attention immediately. Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that the vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Inhalation:-**

Get medical attention immediately. Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In the event of any complaints or symptoms, avoid further exposure.

**Protection of first-aiders:-**

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing or wear gloves.

**OTHER HEALTH WARNINGS:**

The toxicological and carcinogenic properties of this material have not been fully investigated. Handle accordingly, avoiding contact.

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SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

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**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:**

**SMALL SPILL:-**

On small spills, add absorbent (soil may be used in the absence of other suitable materials), scoop up material and place in a sealable, liquid-proof container for disposal.

**LARGE SPILL:-**

For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

**PERSONAL PRECAUTIONS:-**

Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment.

**ENVIRONMENTAL PRECAUTIONS:-**

Avoid dispersal of spilled material and run off and contact with soil, waterways, drains and sewers.

**WASTE DISPOSAL METHOD:**

The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:**

**Handling:-**

Do not get in eyes or on skin or clothing. Keep container closed. Use only with adequate ventilation. Do not breathe vapor or mist. Wash thoroughly after handling.

**Storage:-**

Keep container tightly closed. Keep container in a cool, well-ventilated area.

**OTHER PRECAUTIONS:**

Wash Thoroughly after handling.  
Do not get it eyes, on skin, or clothing.  
Do not breathe dust, vapor, mist, or gas.  
Keep Container closed when not in use.  
Empty container may contain hazardous residues.

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SECTION VIII - CONTROL MEASURES

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**VENTILATION REQUIREMENTS:**

Use only with adequate ventilation. If user operations generate dust, fumes, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory

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SECTION VIII - CONTROL MEASURES (Continued)

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Limits:

PERSONAL PROTECTIVE EQUIPMENT:

Eye/Face:-

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dust. Recommended: splash goggles or face shield.

Skin:-

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Recommended: synthetic or rubber gloves.

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: lab coat, safety apron or overall.

Respiratory:-

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Recommended: in situations where misting or flying may occur, use appropriate certified respirators.

Hygiene Measures:-

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

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SECTION IX - ADDITIONAL INFORMATION

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ADDITIONAL MANUFACTURER WARNINGS:

TOXICOLOGICAL INFORMATION:-

Target organ effects:

Contains material which causes damage to the following organs: upper respiratory tract, skin, eye, lens or cornea.

Specific effects:

Carcinogenic effects: No known significant effects or critical hazards.

Mutagenic effects: No known significant effects or critical hazards.

Teratogenicity / Reproductive toxicity: No known significant effects or critical hazards.

Irritant / Sensitizer:

Ingestion: May cause burns to mouth, throat and stomach.

Inhalation: May cause sensitization by inhalation.

Eyes: Corrosive to eyes.

Skin: Corrosive to the skin.

---

OTHER PRECAUTIONS AND COMMENTS:

Disclaimers:-

Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness.

The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of, or in any way connected with the handling, storage, use, or disposal of the product.

This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

This MSDS has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1200).

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2885-  
Greenhunter Biofuels

72  
8-4-09  
T-35  
CAO



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/14/2008

Dear Jesse Plancarte

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2885

**Expiration Date** 7/14/2010

**Generator:** Green Hunter Biofuels  
**Address:** 13605 Industrial Blvd  
Houston, TX 77015

### Waste Information

**Name of Waste:** Oily water

**TCEQ Waste Code #:** Recycle

**Container Type:**

**Detailed Description of Process Generating Waste:**

Water and biodiesel from washing at biodiesel production plant

**Color:** varies

**Odor:** oil

**pH:** 5-8

**Physical State:**

**Incompatibilities:** oxidizers

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

LRP



4904 Griggs Road, Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

fb

**SECTION 1: Generator Information**

Company: Green Hunter Biofuels

Address: 13605 Industrial Road

City: Houston TX 77015 State: \_\_\_\_\_ Zip: \_\_\_\_\_

Contact: Bruce Baughman Title: \_\_\_\_\_

Phone Number: 713-574-9509 Fax Number: 713-450-1591

24/hr Phone Number: 972-951-1495

US EPA ID No: C2506

State ID No: \_\_\_\_\_ SIC Code: \_\_\_\_\_

**SECTION 2: Billing Information -** ☐ Same as Above

Company: Rada Technologies

Address: PO Box 1147

City: Pearland TX State: TX Zip: 77588

Contact: Jesse Rada Title: \_\_\_\_\_

Phone Number: 281-541-4429 Fax Number: \_\_\_\_\_

**SECTION 3: General Description of the Waste**

Name of Waste: Oily Water

Detailed Description of Process Generating Waste:

Water & Biodiesel from washing at biodiesel production plant

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: Varies Odor: oil

Specific Gravity (water=1): 1 Density: 8.34 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHA? (40 CFR Part 61, Subpart FF) ☐ Yes ☐ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☐ Single-phase ☒ Multi-phase

Container Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)

Frequency: ☒ Weekly ☐ Monthly ☐ Yearly ☐ One-Time

Quantity: 5000 gal

**Is this a USEPA "Hazardous Waste" per 40CFR 261.3?**

☐ Yes☒ No

**If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto**

If "Yes", Is it: ☐ D001 (Ignitable)

☐ D002 (Corrosive)☐ D003 (Reactive)

**Characteristic for Toxic Metals:**

☐ D004☐ D005☐ D006

☐ D007

☐ D008

☐ D009

☐ D010

☐ D011

**Characteristic for Toxic Organics: D012 thru D043** (please list all that apply)

**Is this an "F" or "K" Listed waste or mixed with one?**

☐ Yes☐ No

**If "Yes", then please list ALL applicable codes:**

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No

☐ Yes☒ No

If "Yes", then please list ALL applicable codes:

**Texas State Waste Code Number:**

Recycle

**Proper US DOT Shipping Name:**

Non RCRA / Non DOT Regulated Material  
NA PG: NA RQ: NA

Class: NA UN/NA:

PG :

**PG :**

N/A

**RQ:**

11A

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
240 20		5-8		NA mg/l		NA mg/l		CL %	
Oil & Grease		TOC		Zinc		Copper		Nickel	
7500	mg/l	10000	mg/l	NA	mg/l	NA	mg/l	NA	mg/l

#### SECTION 4: Physical and Chemical Data

[illegible]

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.

CES rpt

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

Oxidizers

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	<input checked="" type="checkbox"/>
TCLP Volatiles:	<input checked="" type="checkbox"/>
TCLP Semi-Volatiles:	<input checked="" type="checkbox"/>
Reactivity:	<input checked="" type="checkbox"/>
Corrosivity:	<input checked="" type="checkbox"/>
Ignitability:	<input checked="" type="checkbox"/>

**SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)**

Is this material a wastewater or wastewater sludge?  
If 'Yes', complete this section.

☒ YES ☐ NO

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.**

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☒ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory : Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☒ Oils Subcategory
- ☐ Organics Subcategory

**SECTION 10 Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

**SECTION 11: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_

Date: \_\_\_\_\_

7/14/08

Printed Name/Title: \_\_\_\_\_

Jesse Planckarte

ER Supervisor

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: \_\_\_\_\_

Date: \_\_\_\_\_

7-14-08

☒ Approved

☐ Rejected

Approval Number: \_\_\_\_\_

2885

**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

\$ 0.12/gal

**2. Contamination Limits (maximum limit before surcharges apply):**

< 1% solids, < 5000 TOC

**3. Surcharge Pricing:**

\$2 per rate sheet

**4. Special Testing Requirements:**

TOC, pH, phenol, Solids

**5. Treatment and Handling Protocol:**

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☒ Subcategory B

☐ Subcategory C

**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**7. Tests for Product Recovered/Recycled (if applicable):**

--

**8. Management for Product Recovered/Recycled (if applicable):**

--



4904 Griggs Road  
Houston, TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1676

To: Joy Baker  
Cc: Kelli Lofton, Gary Peterson, Prabhaker

Date: 07/14/08

From: Miles Root

Lab Memo: 08-126

Subject: **Rada Technologies Evaluation 0708-29**

A sample of oily water from Rada Technologies has been checked for processing at CES. This sample is evaluation 0708-29 and is oily water from biodiesel production. The generator of this material is Green Hunter Biofuels. Overall, this stream looks good for processing at CES and will need minimum special handling.

This sample contains less than 5% oil with a trace of solids. The oil phase separates fairly quickly after mixing and will not need to be actually heated in our oil tanks for processing. The water treats easily and has solids that quickly fall out of solution. The TOC, metals and phenol are all very acceptable and no special surcharge will be needed. The table below summarizes the analytical work on this stream.

Rada Technologies Evaluation 0708-29	
Neat	
Oil, vol%	<5
Solids, vol%	Trace
pH	11
Treated	
Phenol, ppm	0
TOC, ppm	1708
Metals	
Cd	0.076
Cr	0.056
Cu	0.095
Ni	0.173
Zn	0.071

2857  
Reslink



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 6/20/2008

Dear Doug Highsmith

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2857

**Expiration Date** 6/20/2010

**Generator:** Reslink

**Address:** 1121 Buschong St  
Houston, TX 77039

### Waste Information

**Name of Waste:** Mop water

**TCEQ Waste Code #:** 00031142

**Container Type:**

**Detailed Description of Process Generating Waste:**

Floor cleaning and drainage of water

**Color:** varies

**Odor:** mild

**pH:** 6-9

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.



**CES Environmental  
Services, Inc.**

4904 Griggs Road, Houston, TX 77021

Phone: (713) 676-1460 Fax: (713) 676-1676

<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

*There is no oil in this  
stream to recover.  
Can be brought in as  
class 1 with complete  
analytical.  
Thanks  
Rabbin*

**SECTION 1: Generator Information**

Company: Reslink, Inc.

Address: 1121 Buschong Street

City: Houston State: TX Zip: 77039

Contact: Linda Koch Title: \_\_\_\_\_

Phone Number: 281-227-9854 Fax Number: 281-227-6834

24/hr Phone Number: 281-734-7468

US EPA ID No: TXCESQG33497

State ID No: \_\_\_\_\_ 31142 SIC Code: \_\_\_\_\_ 1389

**SECTION 2: Billing Information - ☐ Same as Above**

Company: Rineco

Address: 819 Vulcan Rd.

City: Benton State: AR Zip: 72015

Contact: Douglas Highsmith Title: Non-Fuels Chemist

Phone Number: 800-377-4692 Fax Number: \_\_\_\_\_

**SECTION 3: General Description of the Waste**

Name of Waste: Mop Water

Detailed Description of Process Generating Waste: \_\_\_\_\_

Floor Cleaning and drainage of Water

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: varies Odor: mild

Specific Gravity (water=1): 1 Density: 8.34 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☐ Single-phase ☒ Multi-phase

Container Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☒ Monthly ☐ Yearly ☐ One-Time

Quantity: 500 gallons

Is this a USEPA "Hazardous Waste" per 40CFR 261.37 ☐ Yes ☒ No

(If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)  
 characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009  
☐ D010 ☐ D011

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. C&S Analytical

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	<u>X</u>
TCLP Volatiles:	<u>X</u>
TCLP Semi-Volatiles:	<u>X</u>
Reactivity:	<u>X</u>
Corrosivity:	<u>X</u>
Ignitability:	<u>X</u>

**SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)**

Is this material a wastewater or wastewater sludge?

☒ YES ☐ NO

If "Yes", complete this section.

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.**

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☒ Underground storage remediation waste
- ☒ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☒ Oils Subcategory
- ☐ Organics Subcategory

**SECTION 10 Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

**SECTION 11: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☒ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_

Date: \_\_\_\_\_

6/18/2008

Printed Name/Title: Douglas Highsmith/Non-Fuels Chemist

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: \_\_\_\_\_

Date: 6-20-08

☒ Approved

☐ Rejected

Approval Number: \_\_\_\_\_

2357

**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

\$0.10/gal + \$20/hr trans + current fsc  
\$100 min

**2. Contamination Limits (maximum limit before surcharges apply):**

std per rate sheet

**3. Surcharge Pricing:**

rate sheet

**4. Special Testing Requirements:**

WWTP

**5. Treatment and Handling Protocol:**

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☒ Subcategory B

☐ Subcategory C

7. **Tests for Product Recovered/Recycled (if applicable):**

--

8. **Management for Product Recovered/Recycled (if applicable):**

--



4904 Griggs Road  
Houston, TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1676

To: Joy Baker  
Cc: Keli Lofton, Gary Peterson, Prabhaker

Date: 06/17/08

From: Miles Root

Lab Memo: 08-109

Subject: **Rineco Evaluation 0608-40**

A sample of water from Rineco has been evaluated for processing at CES. This sample is evaluation 0608-40 and is mop water/oily water from the rinsing of oil tanks. Overall, this sample is treatable water that will have a partial oil sheen and can be processed without issues.

This sample has a partial oil sheen with a flash point greater than 140 deg F. When treated, the oil is no longer visible. The sample easily treats with no issues, has no phenols, low TOC and acceptable metals. This stream is approximately 5000 gallons. The table below summarizes the analytical results.

Rineco Evaluation 0608-40	
pH	7
Solids, vol%	0.1
Phenols, ppm	0
TOC, mg/L	1475
Flash Point, deg F	>140
Metals	
Cd	0.104
Cr	0.173
Cu	0.222
Ni	1.006
Zn	0.112

000 31142



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

**Reslink a Schlumberger Corp.**

**Certificate of Analysis Number:**

**08041071**

<b><u>Report To:</u></b>  Reslink a Schlumberger Corp. Kathy Allford 1121 Buschong Rd.  Houston Texas 77039- ph (713) 725-3588      fax:	<b><u>Project Name:</u></b> Reslink  <b><u>Site:</u></b> Houston, TX  <b><u>Site Address:</u></b>   <b><u>PO Number:</u></b>  <b><u>State:</u></b> Texas  <b><u>State Cert. No.:</u></b> T104704205-06-TX  <b><u>Date Reported:</u></b> 5/2/2008
---	---

This Report Contains A Total Of 34 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

5/2/2008

Date

Test results meet all requirements of NELAC, unless specified in the narrative.

EPAHO106001360



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

Case Narrative for:  
**Reslink a Schlumberger Corp.**

Certificate of Analysis Number:

**08041071**

<b>Report To:</b>  Reslink a Schlumberger Corp. Kathy Allford 1121 Buschong Rd.  Houston Texas 77039- ph (713) 725-3588      fax:	<b>Project Name:</b> Reslink <b>Site:</b> Houston, TX <b>Site Address:</b>  <b>PO Number:</b> <b>State:</b> Texas <b>State Cert. No.:</b> T104704205-06-TX <b>Date Reported:</b> 5/2/2008
--	--

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report (" mg/kg-dry " or " ug/kg-dry " ).

Due to the sample matrix, TCLP metals could not be analyzed for your sample "Degreasing Solvents". Per our conversation April, 24, 2008 the sample was logged in for Total Metals by SW846 method 6010B.

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Your sample ID "Mop Water" (SPL ID:08041071-04) was randomly selected for use in SPL's quality control program for the TCLP Metals analysis by SW846 Method 1311/7470A. The MS and MSD recoveries were outside of the advisable quality control limits for Mercury (Batch ID:78035) due to matrix interference. A Post Digestion Spike (PDS) and Post Digestion Spike Duplicate (PDSD) was performed and all recoveries were outside quality control limits. A Laboratory Control Sample (LCS) was analyzed as a quality control check for the analytical batch and all recoveries were within acceptable limits.

Some of the percent recoveries and RPD's on the QC report for the MS/MSD may be different than the calculated recoveries and RPD's using the sample result and the MS/MSD results that appear on the report because, the actual raw result is used to perform the calculations for percent recovery and RPD.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

5/2/2008

D'Anna Stelly  
Project Manager

Test results meet all requirements of NELAC, unless specified in the narrative.

Date

EPAHO106001361



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

**Reslink a Schlumberger Corp.**

**Certificate of Analysis Number:**

**08041071**

**Report To:** Reslink a Schlumberger Corp.  
Kathy Allford  
1121 Buschong Rd.

Houston  
Texas

77039-

ph (713) 725-3588

fax:

**Fax To:**

**Project Name:** Reslink  
**Site:** Houston, TX  
**Site Address:**

**PO Number:**

**State:** Texas

**State Cert. No.:** T104704205-06-TX

**Date Reported:** 5/2/2008

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
Rags w/oil & Solvents	08041071-01	Solid	4/17/2008 10:20:00 AM	4/17/2008 3:11:00 PM	280759	<input type="checkbox"/>
Degreasing Solvents	08041071-02	Solvent	4/17/2008 10:45:00 AM	4/17/2008 3:11:00 PM	280759	<input type="checkbox"/>
Perf Machine Filters	08041071-03	Solid	4/17/2008 10:10:00 AM	4/17/2008 3:11:00 PM	280759	<input type="checkbox"/>
Mop Water	08041071-04	Liquid	4/17/2008 1:00:00 PM	4/17/2008 3:11:00 PM	280759	<input type="checkbox"/>

5/2/2008

D'Anna Stelly  
Project Manager

Date

Richard R. Reed  
Laboratory Director

Ted Yen  
Quality Assurance Officer

5/2/2008 7:24:44 PM

EPAHO106001362



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

Client Sample ID: Rags w/oil & Solvents

Collected: 04/17/2008 10:20

SPL Sample ID: 08041071-01

Site: Houston, TX

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
<b>TCLP MERCURY</b>				<b>MCL</b>	<b>SW7470A</b>	<b>Units: mg/L</b>	
Mercury	ND		0.0002	0.2	1	04/22/08 16:53 CMC	4392010

Prep Method	Prep Date	Prep Initials	Prep Factor	Leach Method	Leachate Date	Leach Initials
SW7470A	04/22/2008 12:45	CMC	1.00	SW1311	04/18/2008	GF

<b>TCLP METALS BY METHOD 6010B</b>				<b>MCL</b>	<b>SW6010B</b>	<b>Units: mg/L</b>	
Arsenic	ND		0.2	5	2	04/22/08 22:26 EG	4392785
Barium	ND		1	100	2	04/22/08 22:26 EG	4392785
Cadmium	ND		0.01	1	2	04/22/08 22:26 EG	4392785
Chromium	ND		0.02	5	2	04/22/08 22:26 EG	4392785
Lead	20.7	>MCL	0.1	5	2	04/22/08 22:26 EG	4392785
Selenium	ND		0.2	1	2	04/22/08 22:26 EG	4392785
Silver	ND		0.02	5	2	04/22/08 22:26 EG	4392785

Prep Method	Prep Date	Prep Initials	Prep Factor	Leach Method	Leachate Date	Leach Initials
SW3010A	04/21/2008 16:00	DDW	1.00	SW1311	04/18/2008	GF

TPH TEXAS 1005				MCL	TX1005	Units: mg/kg
C6-C12	59000	5000		10	04/18/08 17:51 RLR	4387638
>C12-C28	70000	5000		10	04/18/08 17:51 RLR	4387638
>C28-C35	ND	5000		10	04/18/08 17:51 RLR	4387638
Total TPH (C6-C35)	129000	5000		10	04/18/08 17:51 RLR	4387638
Surr: 1-Chlorooctane	1354 MI	*	% 70-130	10	04/18/08 17:51 RLR	4387638
Surr: o-Terphenyl	250 MI	*	% 70-130	10	04/18/08 17:51 RLR	4387638

Prep Method	Prep Date	Prep Initials	Prep Factor
TX1005	04/18/2008 4:15	JDM	10.00

**Qualifiers:** ND/U - Not Detected at the Reporting Limit  
B/V - Analyte detected in the associated Method Blank  
\* - Surrogate Recovery Outside Advisable QC Limits  
J - Estimated Value between MDL and PQL  
E - Estimated Value exceeds calibration curve  
TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)  
D - Surrogate Recovery Unreportable due to Dilution  
MI - Matrix Interference

5/2/2008 7:24:52 PM

EPAHO106001363



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

Client Sample ID: Degreasing Solvents

Collected: 04/17/2008 10:45

SPL Sample ID: 08041071-02

Site: Houston, TX

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
<b>CORROSIVITY</b>				<b>MCL</b>	<b>SW9045D</b>	<b>Units: pH Units</b>	
Corrosivity	9.48		0.1	1	04/18/08 16:30	PAC	4386076
<b>IGNITABILITY MODIFIED OPEN CUP</b>				<b>MCL</b>	<b>ASTM D92-01</b>	<b>Units: °F</b>	
Ignitability	>212		20	1	04/21/08 9:00	GF	4388262
<b>MERCURY, TOTAL</b>				<b>MCL</b>	<b>SW7471A</b>	<b>Units: mg/Kg</b>	
Mercury	ND		0.03	1	04/29/08 19:02	CMC	4406055

Prep Method	Prep Date	Prep Initials	Prep Factor
SW7471A	04/29/2008 14:50	CMC	1.00

<b>METALS BY METHOD 6010B, TOTAL</b>				<b>MCL</b>	<b>SW6010B</b>	<b>Units: mg/Kg</b>	
Arsenic	ND		10	1	04/30/08 16:33	EG	4407882
Barium	1.67		0.5	1	04/30/08 16:33	EG	4407882
Cadmium	ND		0.5	1	04/30/08 16:33	EG	4407882
Chromium	ND		1	1	04/30/08 16:33	EG	4407882
Lead	57.2		5	1	04/30/08 16:33	EG	4407882
Selenium	ND		10	1	04/30/08 16:33	EG	4407882
Silver	ND		1	1	04/30/08 16:33	EG	4407882

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3050B	04/25/2008 11:25	DDW	1.00

<b>REACTIVE CYANIDE-SOLID</b>				<b>MCL</b>	<b>SW7.3.3.2</b>	<b>Units: mg/Kg</b>	
Reactive Cyanide	ND		1	6	04/23/08 17:30	ESK	4396010
<b>REACTIVE SULFIDE - SOLID</b>				<b>MCL</b>	<b>SW7.3.4.2</b>	<b>Units: mg/Kg</b>	
Reactive Sulfide	ND		10	1	04/23/08 18:00	ESK	4395977

**Qualifiers:**

ND/U - Not Detected at the Reporting Limit  
B/V - Analyte detected in the associated Method Blank  
\* - Surrogate Recovery Outside Advisable QC Limits  
J - Estimated Value between MDL and PQL  
E - Estimated Value exceeds calibration curve  
TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)  
D - Surrogate Recovery Unreportable due to Dilution  
MI - Matrix Interference

5/2/2008 7:24:52 PM

EPAHO106001364



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

Client Sample ID: Perf Machine Filters

Collected: 04/17/2008 10:10

SPL Sample ID: 08041071-03

Site: Houston, TX

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
<b>TCLP MERCURY</b>				<b>MCL</b>	<b>SW7470A</b>	<b>Units: mg/L</b>	
Mercury	0.000338		0.0002	0.2	1	04/22/08 16:55 CMC	4392011

Prep Method	Prep Date	Prep Initials	Prep Factor	Leach Method	Leachate Date	Leach Initials
SW7470A	04/22/2008 12:45	CMC	1.00	SW1311	04/18/2008	GF

<b>TCLP METALS BY METHOD 6010B</b>				<b>MCL</b>	<b>SW6010B</b>	<b>Units: mg/L</b>	
Arsenic	ND		0.2	5	2	04/30/08 17:57 EG	4408225
Barium	ND		1	100	2	04/30/08 17:57 EG	4408225
Cadmium	0.0117		0.01	1	2	04/30/08 17:57 EG	4408225
Chromium	ND		0.02	5	2	04/30/08 17:57 EG	4408225
Lead	0.751		0.1	5	2	04/30/08 17:57 EG	4408225
Selenium	ND		0.2	1	2	04/30/08 17:57 EG	4408225
Silver	ND		0.02	5	2	04/30/08 17:57 EG	4408225

Prep Method	Prep Date	Prep Initials	Prep Factor	Leach Method	Leachate Date	Leach Initials
SW3010A	04/21/2008 16:00	DDW	1.00	SW1311	04/18/2008	GF

TPH TEXAS 1005				MCL	TX1005	Units: mg/kg
C6-C12	ND	5000		10	04/18/08 17:59 RLR	4387639
>C12-C28	100000	5000		10	04/18/08 17:59 RLR	4387639
>C28-C35	ND	5000		10	04/18/08 17:59 RLR	4387639
Total TPH (C6-C35)	100000	5000		10	04/18/08 17:59 RLR	4387639
Surr: 1-Chlorooctane	0 MI *	% 70-130		10	04/18/08 17:59 RLR	4387639
Surr: o-Terphenyl	577 MI *	% 70-130		10	04/18/08 17:59 RLR	4387639

Prep Method	Prep Date	Prep Initials	Prep Factor
TX1005	04/18/2008 4:15	JDM	10.00

**Qualifiers:**

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

\* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)

D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

5/2/2008 7:24:53 PM

EPAHO106001365



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

Client Sample ID: Mop Water

Collected: 04/17/2008 13:00

SPL Sample ID: 08041071-04

Site: Houston, TX

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
<b>CORROSIVITY</b>				<b>MCL</b>	<b>SW9040C</b>	<b>Units: pH Units</b>	
Corrosivity	6.99		0.1	1	04/18/08 16:30	PAC	4386105
<b>IGNITABILITY</b>				<b>MCL</b>	<b>SW1010A</b>	<b>Units: °F</b>	
Ignitability	>212		20	1	04/21/08 9:00	GF	4388215
<b>REACTIVE CYANIDE-WATER</b>				<b>MCL</b>	<b>SW7.3.3.2</b>	<b>Units: mg/L</b>	
Reactive Cyanide	ND		0.5	1	04/23/08 17:30	ESK	4395989
<b>REACTIVE SULFIDE - AQUEOUS</b>				<b>MCL</b>	<b>SW7.3.4.2</b>	<b>Units: mg/L</b>	
Reactive Sulfide	ND		10	1	04/23/08 18:00	ESK	4395963
<b>TCLP MERCURY</b>				<b>MCL</b>	<b>SW7470A</b>	<b>Units: mg/L</b>	
Mercury	0.00273		0.0002	0.2	04/24/08 18:57	CMC	4396703

Prep Method	Prep Date	Prep Initials	Prep Factor	Leach Method	Leachate Date	Leach Initials
SW7470A	04/24/2008 14:00	CMC	1.00	SW1311	04/18/2008	GF

<b>TCLP METALS BY METHOD 6010B</b>				<b>MCL</b>	<b>SW6010B</b>	<b>Units: mg/L</b>	
Antimony	ND		0.2	2	04/22/08 22:31	EG	4392786
Arsenic	ND		0.2	5	04/22/08 22:31	EG	4392786
Barium	ND		1	100	04/22/08 22:31	EG	4392786
Beryllium	ND		0.006	2	04/22/08 22:31	EG	4392786
Cadmium	0.0114		0.01	1	04/22/08 22:31	EG	4392786
Chromium	ND		0.02	5	04/22/08 22:31	EG	4392786
Lead	0.759		0.1	5	04/22/08 22:31	EG	4392786
Nickel	0.067		0.04	2	04/22/08 22:31	EG	4392786
Selenium	ND		0.2	1	04/22/08 22:31	EG	4392786
Silver	ND		0.02	5	04/22/08 22:31	EG	4392786

Prep Method	Prep Date	Prep Initials	Prep Factor	Leach Method	Leachate Date	Leach Initials
SW3010A	04/21/2008 16:00		1.00	SW1311	04/18/2008	GF

**Qualifiers:**

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

\* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)

D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

5/2/2008 7:24:53 PM

EPAHO106001366



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

Client Sample ID: Mop Water

Collected: 04/17/2008 13:00 SPL Sample ID: 08041071-04

Site: Houston, TX

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
<b>TCLP VOLATILE ORGANICS</b>				<b>MCL</b>	<b>SW8260B</b>	<b>Units: ug/L</b>	
1,1-Dichloroethene	ND		50	700	10	04/21/08 19:56 LT	4391736
1,2-Dichloroethane	ND		50	500	10	04/21/08 19:56 LT	4391736
2-Butanone	ND		200	200000	10	04/21/08 19:56 LT	4391736
Benzene	ND		50	500	10	04/21/08 19:56 LT	4391736
Carbon tetrachloride	ND		50	500	10	04/21/08 19:56 LT	4391736
Chlorobenzene	ND		50	100000	10	04/21/08 19:56 LT	4391736
Chloroform	ND		50	6000	10	04/21/08 19:56 LT	4391736
Tetrachloroethene	ND		50	700	10	04/21/08 19:56 LT	4391736
Trichloroethene	ND		50	500	10	04/21/08 19:56 LT	4391736
Vinyl chloride	ND		100	200	10	04/21/08 19:56 LT	4391736
Surr: 1,2-Dichloroethane-d4	96.0		% 62-130		10	04/21/08 19:56 LT	4391736
Surr: 4-Bromofluorobenzene	94.0		% 70-130		10	04/21/08 19:56 LT	4391736
Surr: Toluene-d8	92.0		% 74-122		10	04/21/08 19:56 LT	4391736

Leach Method	Leachate Date	Leach Initials
SW1311	04/18/2008	MF

<b>TPH TEXAS 1005</b>				<b>MCL</b>	<b>TX1005</b>	<b>Units: mg/L</b>	
C6-C12	ND		5.1		1	04/22/08 12:41 RLR	4392578
>C12-C28	57		5.1		1	04/22/08 12:41 RLR	4392578
>C28-C35	11		5.1		1	04/22/08 12:41 RLR	4392578
Total TPH (C6-C35)	68		5.1		1	04/22/08 12:41 RLR	4392578
Surr: 1-Chlorooctane	166 MI	*	% 70-130		1	04/22/08 12:41 RLR	4392578
Surr: o-Terphenyl	181 MI	*	% 70-130		1	04/22/08 12:41 RLR	4392578

Prep Method	Prep Date	Prep Initials	Prep Factor
TX1005	04/21/2008 13:00	JDM	1.03

**Qualifiers:**  
ND/U - Not Detected at the Reporting Limit  
B/V - Analyte detected in the associated Method Blank  
\* - Surrogate Recovery Outside Advisable QC Limits  
J - Estimated Value between MDL and PQL  
E - Estimated Value exceeds calibration curve  
TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)  
D - Surrogate Recovery Unreportable due to Dilution  
MI - Matrix Interference

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EPAHO106001367

# *Quality Control Documentation*

5/2/2008 7:24:53 PM

EPAHO106001368



# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

Reslink a Schlumberger Corp.

Reslink

Analysis: TPH Texas 1005  
Method: TX1005

WorkOrder: 08041071  
Lab Batch ID: 77787

## Method Blank

## Samples in Analytical Batch:

RunID: HP\_B\_080418A-4387574 Units: mg/kg  
Analysis Date: 04/18/2008 17:11 Analyst: RLR  
Preparation Date: 04/18/2008 11:42 Prep By: JDM Method TX1005

Lab Sample ID  
08041071-01A  
08041071-03A  
Client Sample ID  
Rags w/oil & Solvents  
Perf Machine Filters

Analyte	Result	Rep Limit
>C12-C28	ND	50
>C28-C35	ND	50
C6-C12	ND	50
Total TPH (C6-C35)	ND	50
Surr: 1-Chlorooctane	100.7	70-130
Surr: o-Terphenyl	106.7	70-130

## Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: HP\_B\_080418A-4387572 Units: mg/kg  
Analysis Date: 04/18/2008 16:55 Analyst: RLR  
Preparation Date: 04/18/2008 11:42 Prep By: JDM Method TX1005

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
>C12-C28	1000	1160	116	1000	1080	108	7.2	20	75	125
C6-C12	1000	1050	105	1000	979	97.9	7.3	20	75	125
Total TPH (C6-C35)	2000	2210	111	2000	2060	103	7.2	20	75	125
Surr: 1-Chlorooctane	50.0	45.8	91.6	50.0	42.8	85.6	6.7	30	70	130
Surr: o-Terphenyl	50.0	53.9	108	50.0	50.0	100	7.5	30	70	130

## Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08041070-01  
RunID: HP\_B\_080418A-4387635 Units: mg/kg  
Analysis Date: 04/18/2008 17:27 Analyst: RLR  
Preparation Date: 04/18/2008 11:42 Prep By: JDM Method TX1005

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
>C12-C28	167	1000	1850	168 *	1000	1880	172 *	1.72	20	75	125
C6-C12	ND	1000	1040	104	1000	1070	107	2.00	20	75	125
Total TPH (C6-C35)	167	2000	2890	136 *	2000	2950	139 *	1.82	20	75	125

**Qualifiers:** ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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EPAHO106001369



# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Reslink a Schlumberger Corp.

Reslink

Analysis: TPH Texas 1005  
Method: TX1005

WorkOrder: 08041071  
Lab Batch ID: 77787

### Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08041070-01  
RunID: HP\_B\_080418A-4387635 Units: mg/kg  
Analysis Date: 04/18/2008 17:27 Analyst: RLR  
Preparation Date: 04/18/2008 11:42 Prep By: JDM Method TX1005

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Surr: 1-Chlorooctane	ND	50	45.4	90.7	50	47.0	93.9	3.45	30	70	130
Surr: o-Terphenyl	ND	50	124	249 *	50	127	255 *	2.47	30	70	130

**Qualifiers:** ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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EPAHO106001370



# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Reslink a Schlumberger Corp.

Reslink

Analysis: TPH Texas 1005  
Method: TX1005

WorkOrder: 08041071  
Lab Batch ID: 77869

### Method Blank

### Samples in Analytical Batch:

RunID: HP\_B\_080422A-4392577 Units: mg/L  
Analysis Date: 04/22/2008 12:33 Analyst: RLR  
Preparation Date: 04/21/2008 13:00 Prep By: JDM Method TX1005

Lab Sample ID 08041071-04B  
Client Sample ID Mop Water

Analyte	Result	Rep Limit
>C12-C28	ND	5.0
>C28-C35	ND	5.0
C6-C12	ND	5.0
Total TPH (C6-C35)	ND	5.0
Surr: 1-Chlorooctane	110.6	70-130
Surr: o-Terphenyl	107.6	70-130

### Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: HP\_B\_080422A-4392575 Units: mg/L  
Analysis Date: 04/22/2008 12:16 Analyst: RLR  
Preparation Date: 04/21/2008 13:00 Prep By: JDM Method TX1005

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
>C12-C28	100	114	114	100	110	110	3.2	20	75	125
C6-C12	100	110	110	100	107	107	2.2	20	75	125
Total TPH (C6-C35)	200	224	112	200	217	109	2.7	20	75	125
Surr: 1-Chlorooctane	5.00	4.93	98.6	5.00	4.76	95.2	3.5	30	70	130
Surr: o-Terphenyl	5.00	5.40	108	5.00	5.24	105	3.1	30	70	130

### Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08041153-07  
RunID: HP\_B\_080422A-4392580 Units: mg/L  
Analysis Date: 04/22/2008 12:58 Analyst: RLR  
Preparation Date: 04/21/2008 13:00 Prep By: JDM Method TX1005

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
>C12-C28	ND	105	117	111	103	114	111	2.12	20	75	125
C6-C12	ND	105	113	108	103	111	108	1.76	20	75	125
Total TPH (C6-C35)	ND	210	230	109	205	225	110	1.94	20	75	125

**Qualifiers:** ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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EPAHO106001371



# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Reslink a Schlumberger Corp.

Reslink

Analysis: TPH Texas 1005  
Method: TX1005

WorkOrder: 08041071  
Lab Batch ID: 77869

### Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08041153-07  
RunID: HP\_B\_080422A-4392580 Units: mg/L  
Analysis Date: 04/22/2008 12:58 Analyst: RLR  
Preparation Date: 04/21/2008 13:00 Prep By: JDM Method TX1005

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Surr: 1-Chlorooctane	ND	5.24	5.03	96.0	5.14	4.95	96.4	1.60	20	70	130
Surr: o-Terphenyl	ND	5.24	5.54	106	5.14	5.35	104	3.43	20	70	130

**Qualifiers:** ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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EPAHO106001372



# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Reslink a Schlumberger Corp.

Reslink

Analysis: TCLP Metals by Method 6010B  
Method: SW6010B

WorkOrder: 08041071  
Lab Batch ID: 77890

### Method Blank

### Samples in Analytical Batch:

RunID: TJA\_080422A-4392771 Units: mg/L  
Analysis Date: 04/22/2008 21:25 Analyst: EG  
Preparation Date: 04/21/2008 16:00 Prep By: DD Method SW3010A

Lab Sample ID      Client Sample ID  
08041071-01A      Rags w/oil &Solvents  
08041071-04A      Mop Water

Analyte	Result	Rep Limit
Antimony	ND	0.1
Arsenic	ND	0.1
Barium	ND	0.5
Beryllium	ND	0.003
Cadmium	ND	0.005
Chromium	ND	0.01
Lead	ND	0.05
Nickel	ND	0.02
Selenium	ND	0.1
Silver	ND	0.01

### Leachate Blank

RunID: TJA\_080422A-4392772 Units: mg/L  
Analysis Date: 04/22/2008 21:29 Analyst: EG  
Preparation Date: 04/21/2008 16:00 Prep By: DD Method SW3010A  
Leach Date: 04/18/2008 0:00 Leach By: GF Method SW1311

Analyte	Result	Rep Limit
Antimony	ND	0.4
Arsenic	ND	0.2
Barium	ND	1
Beryllium	ND	0.012
Cadmium	ND	0.01
Chromium	ND	0.02
Lead	ND	0.1
Nickel	ND	0.08
Selenium	ND	0.2
Silver	ND	0.02

### Laboratory Control Sample (LCS)

RunID: TJA\_080422A-4392773 Units: mg/L  
Analysis Date: 04/22/2008 21:33 Analyst: EG  
Leach Date: 04/18/2008 0:00 Leach By: GF Method SW1311

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Antimony	2.000	2.054	102.7	80	120
Arsenic	2.000	2.098	104.9	80	120
Barium	2.000	1.862	93.10	80	120
Beryllium	2.000	1.927	96.36	80	120

**Qualifiers:** ND/U - Not Detected at the Reporting Limit      MI - Matrix Interference  
B/V - Analyte detected in the associated Method Blank      D - Recovery Unreportable due to Dilution  
J - Estimated value between MDL and PQL      \* - Recovery Outside Advisable QC Limits  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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EPAHO106001373



# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Reslink a Schlumberger Corp.

Reslink

Analysis: TCLP Metals by Method 6010B  
Method: SW6010B

WorkOrder: 08041071  
Lab Batch ID: 77890

### Laboratory Control Sample (LCS)

RunID: TJA\_080422A-4392773 Units: mg/L  
Analysis Date: 04/22/2008 21:33 Analyst: EG

Leach Date: 04/18/2008 0:00 Leach By: GF Method SW1311

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Cadmium	2.000	1.995	99.76	80	120
Chromium	2.000	1.970	98.50	80	120
Lead	2.000	2.026	101.3	80	120
Nickel	2.000	1.968	98.38	80	120
Selenium	2.000	2.062	103.1	80	120
Silver	2.000	1.893	94.63	80	120

### Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08041054-02  
RunID: TJA\_080422A-4392775 Units: mg/L  
Analysis Date: 04/22/2008 21:42 Analyst: EG  
Preparation Date: 04/21/2008 16:00 Prep By: DD Method SW3010A  
Leach Date: 04/18/2008 0:00 Leach By: GF Method SW1311

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Antimony	ND	2	2.029	101.4	2	2.097	104.8	3.300	20	75	125
Arsenic	ND	2	2.016	100.8	2	2.102	105.1	4.204	20	75	125
Barium	1.457	2	3.219	88.07	2	3.258	90.00	1.194	20	75	125
Beryllium	ND	2	1.907	95.33	2	1.933	96.64	1.368	20	75	125
Cadmium	0.04419	2	1.980	96.77	2	2.037	99.64	2.856	20	75	125
Chromium	ND	2	1.889	94.43	2	1.934	96.70	2.376	20	75	125
Lead	ND	2	1.978	98.89	2	1.986	99.30	0.4062	20	75	125
Nickel	0.5052	2	2.368	93.14	2	2.409	95.18	1.715	20	75	125
Selenium	ND	2	2.070	103.5	2	2.097	104.9	1.303	20	75	125
Silver	ND	2	1.881	94.07	2	1.866	93.29	0.8331	20	75	125

**Qualifiers:** ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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EPAHO106001374



# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Reslink a Schlumberger Corp.

Reslink

Analysis: TCLP Metals by Method 6010B  
Method: SW6010B

WorkOrder: 08041071  
Lab Batch ID: 77890A

### Method Blank

### Samples in Analytical Batch:

RunID: TJA\_080430A-4408214 Units: mg/L  
Analysis Date: 04/30/2008 17:08 Analyst: EG  
Preparation Date: 04/21/2008 16:00 Prep By: DD Method SW3010A

Lab Sample ID 08041071-03A  
Client Sample ID Perf Machine Filters

Analyte	Result	Rep Limit
Arsenic	ND	0.1
Barium	ND	0.5
Cadmium	ND	0.005
Chromium	ND	0.01
Lead	ND	0.05
Selenium	ND	0.1
Silver	ND	0.01

### Leachate Blank

RunID: TJA\_080430A-4408215 Units: mg/L  
Analysis Date: 04/30/2008 17:13 Analyst: EG  
Preparation Date: 04/21/2008 16:00 Prep By: DD Method SW3010A  
Leach Date: 04/18/2008 0:00 Leach By: GF Method SW1311

Analyte	Result	Rep Limit
Arsenic	ND	0.2
Barium	ND	1
Cadmium	ND	0.01
Chromium	ND	0.02
Lead	ND	0.1
Selenium	ND	0.2
Silver	ND	0.02

### Laboratory Control Sample (LCS)

RunID: TJA\_080430A-4408216 Units: mg/L  
Analysis Date: 04/30/2008 17:17 Analyst: EG  
Preparation Date: 04/21/2008 16:00 Prep By: Method SW3010A  
Leach Date: 04/18/2008 0:00 Leach By: GF Method SW1311

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Arsenic	2.000	2.070	103.5	80	120
Barium	2.000	1.920	96.01	80	120
Cadmium	2.000	1.967	98.37	80	120
Chromium	2.000	1.902	95.12	80	120
Lead	2.000	1.967	98.37	80	120
Selenium	2.000	2.067	103.3	80	120
Silver	2.000	1.899	94.96	80	120

**Qualifiers:** ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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EPAHO106001375



# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Reslink a Schlumberger Corp.

Reslink

Analysis: TCLP Metals by Method 6010B  
Method: SW6010B

WorkOrder: 08041071  
Lab Batch ID: 77890A

### Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08041054-02  
RunID: TJA\_080430A-4408218 Units: mg/L  
Analysis Date: 04/30/2008 17:26 Analyst: EG  
Preparation Date: 04/21/2008 16:00 Prep By: DD Method SW3010A  
Leach Date: 04/18/2008 0:00 Leach By: GF Method SW1311

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Arsenic	ND	2	2.017	100.9	2	2.058	102.9	1.983	20	75	125
Barium	1.600	2	3.268	83.42	2	3.369	88.46	3.035	20	75	125
Cadmium	0.04692	2	1.942	94.74	2	2.001	97.72	3.021	20	75	125
Chromium	ND	2	1.816	90.82	2	1.861	93.04	2.418	20	75	125
Lead	ND	2	1.877	93.84	2	1.956	97.82	4.150	20	75	125
Selenium	ND	2	2.059	102.9	2	2.190	109.5	6.163	20	75	125
Silver	ND	2	1.851	92.54	2	1.916	95.80	3.467	20	75	125

**Qualifiers:** ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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EPAHO106001376



# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Reslink a Schlumberger Corp.

Reslink

Analysis: TCLP Mercury  
Method: SW7470A

WorkOrder: 08041071  
Lab Batch ID: 77931

### Method Blank

### Samples in Analytical Batch:

RunID: HGLC_080422A-4392002	Units: mg/L	<u>Lab Sample ID</u>	<u>Client Sample ID</u>
Analysis Date: 04/22/2008 16:29	Analyst: CMC	08041071-01A	Rags w/oil & Solvents
Preparation Date: 04/22/2008 12:45	Prep By: CMC Method SW7470A	08041071-03A	Perf Machine Filters

Analyte	Result	Rep Limit
Mercury	ND	0.0002

### Leachate Blank

RunID: HGLC\_080422A-4392003 Units: mg/L  
Analysis Date: 04/22/2008 16:31 Analyst: CMC  
Preparation Date: 04/22/2008 12:45 Prep By: CMC Method SW7470A  
Leach Date: 04/18/2008 0:00 Leach By: GF Method SW1311

Analyte	Result	Rep Limit
Mercury	ND	0.0002

### Laboratory Control Sample (LCS)

RunID: HGLC\_080422A-4392015 Units: mg/L  
Analysis Date: 04/22/2008 17:06 Analyst: CMC  
Preparation Date: 04/22/2008 12:45 Prep By: CMC Method SW7470A  
Leach Date: 04/18/2008 0:00 Leach By: GF Method SW1311

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Mercury	0.002000	0.001939	96.96	80	120

### Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08041054-02  
RunID: HGLC\_080422A-4392005 Units: mg/L  
Analysis Date: 04/22/2008 16:38 Analyst: CMC  
Preparation Date: 04/22/2008 12:45 Prep By: CMC Method SW7470A  
Leach Date: 04/18/2008 0:00 Leach By: GF Method SW1311

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Mercury	0.0003826	0.002	0.002014	81.56	0.002	0.001978	79.79	1.771	20	75	125

**Qualifiers:** ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

5/2/2008 7:24:57 PM

EPAHO106001377



# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Reslink a Schlumberger Corp.

Reslink

Analysis: TCLP Mercury  
Method: SW7470A

WorkOrder: 08041071  
Lab Batch ID: 78035

### Method Blank

### Samples in Analytical Batch:

RunID: HGLC\_080424A-4396700 Units: mg/L  
Analysis Date: 04/24/2008 18:42 Analyst: CMC  
Preparation Date: 04/24/2008 14:00 Prep By: CMC Method SW7470A

Lab Sample ID 08041071-04A  
Client Sample ID Mop Water

Analyte	Result	Rep Limit
Mercury	ND	0.0002

### Leachate Blank

RunID: HGLC\_080424A-4396701 Units: mg/L  
Analysis Date: 04/24/2008 18:47 Analyst: CMC  
Preparation Date: 04/24/2008 14:00 Prep By: CMC Method SW7470A  
Leach Date: 04/18/2008 0:00 Leach By: GF Method SW1311

Analyte	Result	Rep Limit
Mercury	ND	0.0002

### Laboratory Control Sample (LCS)

RunID: HGLC\_080424A-4396702 Units: mg/L  
Analysis Date: 04/24/2008 18:54 Analyst: CMC  
Preparation Date: 04/24/2008 14:00 Prep By: CMC Method SW7470A

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Mercury	0.002000	0.002063	103.2	80	120

### Post Digestion Spike (PDS) / Post Digestion Spike Duplicate (PDSD)

Sample Spiked: 08041071-04  
RunID: HGLC\_080424A-4396711 Units: mg/L  
Analysis Date: 04/24/2008 19:36 Analyst: CMC

Analyte	Sample Result	PDS Spike Added	PDS Result	PDS % Recovery	PDSD Spike Added	PDSD Result	PDSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Mercury	0.00273	0.002	0.003843	55.73 *	0.002	0.003663	46.77 *	4.775	20	85	115

### Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

**Qualifiers:** ND/U - Not Detected at the Reporting Limit  
B/V - Analyte detected in the associated Method Blank  
J - Estimated value between MDL and PQL  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count  
MI - Matrix Interference  
D - Recovery Unreportable due to Dilution  
\* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

5/2/2008 7:24:57 PM

EPAHO106001378



# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

Reslink a Schlumberger Corp.

Reslink

Analysis: TCLP Mercury  
Method: SW7470A

WorkOrder: 08041071  
Lab Batch ID: 78035

Sample Spiked: 08041071-04  
RunID: HGLC\_080424A-4396704 Units: mg/L  
Analysis Date: 04/24/2008 19:00 Analyst: CMC  
Preparation Date: 04/24/2008 14:00 Prep By: CMC Method SW7470A

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Mercury	0.002728	0.002	0.004023	64.77 *	0.002	0.003881	57.68 *	3.591	20	75	125

**Qualifiers:** ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

5/2/2008 7:24:57 PM

EPAHO106001379



# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Reslink a Schlumberger Corp.

Reslink

Analysis: Metals by Method 6010B, Total  
Method: SW6010B

WorkOrder: 08041071  
Lab Batch ID: 78091

### Method Blank

### Samples in Analytical Batch:

RunID: TJA\_080430A-4407880 Units: mg/Kg  
Analysis Date: 04/30/2008 16:24 Analyst: EG  
Preparation Date: 04/25/2008 11:25 Prep By: DD Method SW3050B

Lab Sample ID 08041071-02A  
Client Sample ID Degreasing Solvents

Analyte	Result	Rep Limit
Arsenic	ND	10
Barium	ND	0.5
Cadmium	ND	0.5
Chromium	ND	1
Lead	ND	5
Selenium	ND	10
Silver	ND	1

### Laboratory Control Sample (LCS)

RunID: TJA\_080430A-4407881 Units: mg/Kg  
Analysis Date: 04/30/2008 16:29 Analyst: EG  
Preparation Date: 04/25/2008 11:25 Prep By: Method SW3050B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Arsenic	80.90	79.81	98.65	79	121
Barium	156.0	144.8	92.85	82	119
Cadmium	233.0	215.2	92.35	81	119
Chromium	60.80	57.42	94.43	78	121
Lead	76.80	70.99	92.43	81	120
Selenium	82.90	83.02	100.1	76	124
Silver	80.00	76.99	96.23	61	139

### Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08041071-02  
RunID: TJA\_080430A-4408207 Units: mg/Kg  
Analysis Date: 04/30/2008 16:37 Analyst: EG  
Preparation Date: 04/25/2008 11:25 Prep By: DD Method SW3050B

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Arsenic	ND	100	97.50	97.50	100	97.49	97.49	0.007180	20	75	125

**Qualifiers:** ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

5/2/2008 7:24:57 PM

EPAHQ106001380



# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Reslink a Schlumberger Corp.

Reslink

Analysis: Metals by Method 6010B, Total  
Method: SW6010B

WorkOrder: 08041071  
Lab Batch ID: 78091

### Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08041071-02  
RunID: TJA\_080430A-4408207 Units: mg/Kg  
Analysis Date: 04/30/2008 16:37 Analyst: EG  
Preparation Date: 04/25/2008 11:25 Prep By: DD Method SW3050B

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Barium	1.672	100	102.2	100.5	100	100.1	98.40	2.064	20	75	125
Cadmium	ND	100	97.09	97.09	100	96.68	96.68	0.4201	20	75	125
Chromium	ND	100	99.26	98.38	100	98.30	97.42	0.9658	20	75	125
Lead	57.18	100	151.8	94.66	100	148.6	91.47	2.122	20	75	125
Selenium	ND	100	99.26	99.26	100	98.72	98.72	0.5415	20	75	125
Silver	ND	100	98.18	97.37	100	97.59	96.79	0.5956	20	75	125

#### Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

\* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

5/2/2008 7:24:58 PM

EPAHQ106001381



# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Reslink a Schlumberger Corp.

Reslink

Analysis: Mercury, Total  
Method: SW7471A

WorkOrder: 08041071  
Lab Batch ID: 78264

### Method Blank

### Samples in Analytical Batch:

RunID: HGLD\_080429A-4406035 Units: mg/Kg  
Analysis Date: 04/29/2008 18:04 Analyst: CMC  
Preparation Date: 04/29/2008 14:50 Prep By: CMC Method SW7471A

Lab Sample ID 08041071-02A  
Client Sample ID Degreasing Solvents

Analyte	Result	Rep Limit
Mercury	ND	0.03

### Laboratory Control Sample (LCS)

RunID: HGLD\_080429A-4406036 Units: mg/Kg  
Analysis Date: 04/29/2008 18:06 Analyst: CMC  
Preparation Date: 04/29/2008 14:50 Prep By: CMC Method SW7471A

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Mercury	3.600	4.002	111.2	68	132

### Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08041621-01  
RunID: HGLD\_080429A-4406038 Units: mg/Kg-dry  
Analysis Date: 04/29/2008 18:11 Analyst: CMC  
Preparation Date: 04/29/2008 14:50 Prep By: CMC Method SW7471A

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Mercury	0.1646	0.3233	0.4909	100.9	0.3233	0.4524	89.01	8.169	20	75	125

**Qualifiers:** ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

5/2/2008 7:24:58 PM

EPAHO106001382



# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Reslink a Schlumberger Corp.

Reslink

Analysis: TCLP Volatile Organics  
Method: SW8260B

WorkOrder: 08041071  
Lab Batch ID: R234819

### Method Blank

### Samples in Analytical Batch:

RunID: N\_080421F-4391734 Units: ug/L  
Analysis Date: 04/21/2008 15:28 Analyst: LT

Lab Sample ID Client Sample ID  
08041071-04A Mop Water

Analyte	Result	Rep Limit
1,1-Dichloroethene	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	20
Benzene	ND	5.0
Carbon tetrachloride	ND	5.0
Chlorobenzene	ND	5.0
Chloroform	ND	5.0
Tetrachloroethene	ND	5.0
Trichloroethene	ND	5.0
Vinyl chloride	ND	10
Surr: 1,2-Dichloroethane-d4	92.0	62-130
Surr: 4-Bromofluorobenzene	92.0	70-130
Surr: Toluene-d8	94.0	74-122

### Leachate Blank

RunID: N\_080421F-4391733 Units: ug/L  
Analysis Date: 04/21/2008 15:01 Analyst: LT

Leach Date: 04/18/2008 0:00 Leach By: MF Method SW1311

Analyte	Result	Rep Limit
1,1-Dichloroethene	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	20
Benzene	ND	5.0
Carbon tetrachloride	ND	5.0
Chlorobenzene	ND	5.0
Chloroform	ND	5.0
Tetrachloroethene	ND	5.0
Trichloroethene	ND	5.0
Vinyl chloride	ND	10
Surr: 1,2-Dichloroethane-d4	92.0	62-130
Surr: 4-Bromofluorobenzene	94.0	70-130
Surr: Toluene-d8	94.0	74-122

### Laboratory Control Sample (LCS)

RunID: N\_080421F-4391732 Units: ug/L  
Analysis Date: 04/21/2008 13:47 Analyst: LT

**Qualifiers:** ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

5/2/2008 7:24:58 PM

EPAHO106001383



# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Reslink a Schlumberger Corp.

Reslink

Analysis: TCLP Volatile Organics  
Method: SW8260B

WorkOrder: 08041071  
Lab Batch ID: R234819

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1-Dichloroethene	20.0	21.0	105	71	146
1,2-Dichloroethane	20.0	20.0	100	64	150
2-Butanone	120	120	100	20	235
Benzene	20.0	20.0	100	76	126
Carbon tetrachloride	20.0	18.0	90.0	66	137
Chlorobenzene	20.0	18.0	90.0	67	136
Chloroform	20.0	21.0	105	70	135
Tetrachloroethene	20.0	19.0	95.0	26	200
Trichloroethene	20.0	18.0	90.0	64	137
Vinyl chloride	20.0	21.0	105	31	147
Surr: 1,2-Dichloroethane-d4	50.0	46	92.0	62	130
Surr: 4-Bromofluorobenzene	50.0	50	100	70	130
Surr: Toluene-d8	50.0	48	96.0	74	122

### Matrix Spike (MS)

Sample Spiked: 08041180-04  
RunID: N\_080421F-4391735 Units: ug/L  
Analysis Date: 04/21/2008 17:42 Analyst: LT

Analyte	Sample Result	Spike Added	MS Result	MS % Recovery	Low Limit	High Limit
1,1-Dichloroethene	ND	200	220	110	71	146
1,2-Dichloroethane	ND	200	200	100	64	150
2-Butanone	ND	200	220	110	20	235
Benzene	ND	200	200	100	78	126
Carbon tetrachloride	ND	200	200	100	72	141
Chlorobenzene	ND	200	190	95.0	78	125
Chloroform	ND	200	220	110	70	135
Tetrachloroethene	ND	200	180	90.0	36	145
Trichloroethene	ND	200	190	95.0	77	125
Vinyl chloride	ND	200	210	105	31	147
Surr: 1,2-Dichloroethane-d4	ND	500	460	92.0	62	130
Surr: 4-Bromofluorobenzene	ND	500	500	100	70	130
Surr: Toluene-d8	ND	500	480	96.0	74	122

**Qualifiers:** ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

5/2/2008 7:24:58 PM

EPAHO106001384



# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Reslink a Schlumberger Corp.

Reslink

Analysis: Corrosivity  
Method: SW9045D

WorkOrder: 08041071  
Lab Batch ID: R234502

### Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
08041071-02B	Degreasing Solvents

### Laboratory Control Sample (LCS)

RunID: WET\_080418L-4386075 Units: pH Units  
Analysis Date: 04/18/2008 16:30 Analyst: PAC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Corrosivity	7.000	7.040	100.6	98	102

### Sample Duplicate

Original Sample: 08041071-02  
RunID: WET\_080418L-4386076 Units: pH Units  
Analysis Date: 04/18/2008 16:30 Analyst: PAC

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Corrosivity	9.48	9.45	0.317	20

**Qualifiers:** ND/U - Not Detected at the Reporting Limit  
B/V - Analyte detected in the associated Method Blank  
J - Estimated value between MDL and PQL  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TN/C - Too numerous to count  
MI - Matrix Interference  
D - Recovery Unreportable due to Dilution  
\* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

5/2/2008 7:24:58 PM

EPAHO106001385



# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Reslink a Schlumberger Corp.

Reslink

Analysis: Corrosivity  
Method: SW9040C

WorkOrder: 08041071  
Lab Batch ID: R234503

### Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
08041071-04C	Mop Water

### Laboratory Control Sample (LCS)

RunID: WET\_080418M-4386103 Units: pH Units  
Analysis Date: 04/18/2008 16:30 Analyst: PAC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Corrosivity	7.000	7.040	100.6	98	102

### Sample Duplicate

Original Sample: 08041101-01  
RunID: WET\_080418M-4386106 Units: pH Units  
Analysis Date: 04/18/2008 16:30 Analyst: PAC

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Corrosivity	7.11	7.09	0.282	20

### Qualifiers:

ND/U - Not Detected at the Reporting Limit  
B/V - Analyte detected in the associated Method Blank  
J - Estimated value between MDL and PQL  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count  
MI - Matrix Interference  
D - Recovery Unreportable due to Dilution  
\* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

5/2/2008 7:24:58 PM

EPAHO106001386



# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Reslink a Schlumberger Corp.

Reslink

Analysis: Ignitability  
Method: SW1010A

WorkOrder: 08041071  
Lab Batch ID: R234612

### Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
08041071-04C	Mop Water

### Laboratory Control Sample (LCS)

RunID: WET\_080421A-4388213 Units: °F  
Analysis Date: 04/21/2008 9:00 Analyst: GF

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Ignitability	81.00	81.18	100.2	97.5	102.5

### Sample Duplicate

Original Sample: 08041071-04  
RunID: WET\_080421A-4388215 Units: °F  
Analysis Date: 04/21/2008 9:00 Analyst: GF

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Ignitability	212	212	0	20

**Qualifiers:** ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

5/2/2008 7:24:59 PM

EPAHO106001387



# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

Reslink a Schlumberger Corp.

Reslink

Analysis: Ignitability Modified Open Cup  
Method: ASTM D92-01

WorkOrder: 08041071  
Lab Batch ID: R234614

## Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
08041071-02B	Degreasing Solvents

## Laboratory Control Sample (LCS)

RunID: WET\_080421B-4388248 Units: °F  
Analysis Date: 04/21/2008 9:00 Analyst: GF

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Ignitability	81.00	81.18	100.2	97.5	102.5

## Sample Duplicate

Original Sample: 08041144-01  
RunID: WET\_080421B-4388269 Units: °F  
Analysis Date: 04/21/2008 9:00 Analyst: GF

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Ignitability	212	212	0	20

## Qualifiers:

ND/U - Not Detected at the Reporting Limit	MI - Matrix Interference
B/V - Analyte detected in the associated Method Blank	D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL	* - Recovery Outside Advisable QC Limits
E - Estimated Value exceeds calibration curve	
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.	
TNTC - Too numerous to count	

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

5/2/2008 7:24:59 PM

EPAHO106001388



# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Reslink a Schlumberger Corp.

Reslink

Analysis: Reactive Sulfide - Aqueous  
Method: SW7.3.4.2

WorkOrder: 08041071  
Lab Batch ID: R235087

### Method Blank

### Samples in Analytical Batch:

RunID: WET\_080423ZG-4395960 Units: mg/L  
Analysis Date: 04/23/2008 18:00 Analyst: ESK

Lab Sample ID 08041071-04C  
Client Sample ID Mop Water

Analyte	Result	Rep Limit
Reactive Sulfide	ND	10

### Laboratory Control Sample (LCS)

RunID: WET\_080423ZG-4395962 Units: mg/L  
Analysis Date: 04/23/2008 18:00 Analyst: ESK

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Reactive Sulfide	100.0	95.60	95.60	85	115

### Sample Duplicate

Original Sample: 08041071-04  
RunID: WET\_080423ZG-4395963 Units: mg/L  
Analysis Date: 04/23/2008 18:00 Analyst: ESK

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Reactive Sulfide	ND	ND	0	20

**Qualifiers:** ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

5/2/2008 7:24:59 PM

EPAHO106001389



# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Reslink a Schlumberger Corp.

Reslink

Analysis: Reactive Sulfide - Solid  
Method: SW7.3.4.2

WorkOrder: 08041071  
Lab Batch ID: R235088

### Method Blank

### Samples in Analytical Batch:

RunID: WET\_080423ZH-4395974 Units: mg/Kg  
Analysis Date: 04/23/2008 18:00 Analyst: ESK

Lab Sample ID 08041071-02B  
Client Sample ID Degreasing Solvents

Analyte	Result	Rep Limit
Reactive Sulfide	ND	10

### Laboratory Control Sample (LCS)

RunID: WET\_080423ZH-4395976 Units: mg/Kg  
Analysis Date: 04/23/2008 18:00 Analyst: ESK

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Reactive Sulfide	100.0	95.60	95.60	85	115

### Sample Duplicate

Original Sample: 08041071-02  
RunID: WET\_080423ZH-4395977 Units: mg/Kg  
Analysis Date: 04/23/2008 18:00 Analyst: ESK

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Reactive Sulfide	ND	ND	0	20

### Qualifiers:

ND/U - Not Detected at the Reporting Limit  
B/V - Analyte detected in the associated Method Blank  
J - Estimated value between MDL and PQL  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count  
MI - Matrix Interference  
D - Recovery Unreportable due to Dilution  
\* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

5/2/2008 7:24:59 PM

EPAHO106001390



# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Reslink a Schlumberger Corp.

Reslink

Analysis: Reactive Cyanide-Water  
Method: SW7.3.3.2

WorkOrder: 08041071  
Lab Batch ID: R235089

### Method Blank

### Samples in Analytical Batch:

RunID: WET\_080423ZI-4395985 Units: mg/L  
Analysis Date: 04/23/2008 17:30 Analyst: ESK

Lab Sample ID 08041071-04C  
Client Sample ID Mop Water

Analyte	Result	Rep Limit
Reactive Cyanide	ND	0.50

### Laboratory Control Sample (LCS)

RunID: WET\_080423ZI-4395986 Units: mg/L  
Analysis Date: 04/23/2008 17:30 Analyst: ESK

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Reactive Cyanide	2.000	0.4370	21.85	5	50

### Sample Duplicate

Original Sample: 08041071-04  
RunID: WET\_080423ZI-4395989 Units: mg/L  
Analysis Date: 04/23/2008 17:30 Analyst: ESK

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Reactive Cyanide	ND	ND	0	20

**Qualifiers:** ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

5/2/2008 7:24:59 PM

EPAHO106001391



## Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

### Reslink a Schlumberger Corp.

Reslink

Analysis: Reactive Cyanide-Solid  
Method: SW7.3.3.2

WorkOrder: 08041071  
Lab Batch ID: R235090

#### Method Blank

#### Samples in Analytical Batch:

RunID: WET\_080423ZJ-4396006 Units: mg/Kg  
Analysis Date: 04/23/2008 17:30 Analyst: ESK

Lab Sample ID 08041071-02B  
Client Sample ID Degreasing Solvents

Analyte	Result	Rep Limit
Reactive Cyanide	ND	1.0

#### Laboratory Control Sample (LCS)

RunID: WET\_080423ZJ-4396007 Units: mg/Kg  
Analysis Date: 04/23/2008 17:30 Analyst: ESK

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Reactive Cyanide	2.000	0.4370	21.85	5	50

#### Sample Duplicate

Original Sample: 08041071-02  
RunID: WET\_080423ZJ-4396010 Units: mg/Kg  
Analysis Date: 04/23/2008 17:30 Analyst: ESK

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Reactive Cyanide	ND	ND	0	20

#### Qualifiers:

ND/U - Not Detected at the Reporting Limit  
B/V - Analyte detected in the associated Method Blank  
J - Estimated value between MDL and PQL  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

MI - Matrix Interference  
D - Recovery Unreportable due to Dilution  
\* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

5/2/2008 7:24:59 PM

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*Sample Receipt Checklist  
And  
Chain of Custody*

5/2/2008 7:25:00 PM

EPAHO106001393



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

**Sample Receipt Checklist**

Workorder:	08041071	Received By:	RE
Date and Time Received:	4/17/2008 3:11:00 PM	Carrier name:	Client
Temperature:	3.0°C	Chilled by:	Water Ice

1. Shipping container/cooler in good condition? Yes ☒ No ☐ Not Present ☐
2. Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Present ☒
3. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
4. Chain of custody present? Yes ☒ No ☐
5. Chain of custody signed when relinquished and received? Yes ☒ No ☐
6. Chain of custody agrees with sample labels? Yes ☒ No ☐
7. Samples in proper container/bottle? Yes ☐ No ☒
  1. Samples submitted for TX1005 received in 32 oz containers.
8. Sample containers intact? Yes ☒ No ☐
9. Sufficient sample volume for indicated test? Yes ☒ No ☐
10. All samples received within holding time? Yes ☒ No ☐
11. Container/Temp Blank temperature in compliance? Yes ☒ No ☐
12. Water - VOA vials have zero headspace? Yes ☐ No ☐ VOA Vials Not Present ☒
13. Water - Preservation checked upon receipt (except VOA\*)? Yes ☐ No ☐ Not Applicable ☒

\*VOA Preservation Checked After Sample Analysis

SPL Representative:

Contact Date & Time:

Client Name Contacted:

Non Conformance Issues:

Client Instructions:

5/2/2008 7:25:00 PM

EPAHO106001394



2858

Weatherford International Ltd (Pirand)



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 6/27/2008

Dear Rick Phillips

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2858

**Expiration Date** 6/27/2010

**Generator:** Weatherford International Ltd. (Pinemont)

**Address:** 7721 Pinemont Drive  
Houston, TX 77040

### Waste Information

**Name of Waste:** Super dry

**TCEQ Waste Code #:** CESQ2071

**Container Type:**

**Detailed Description of Process Generating Waste:**

Material used to clean pipeline for final rinse and drying

**Color:** clear

**Odor:** none

**pH:** 8-10

**Physical State:**

**Incompatibilities:** oxidizers

**Safety Related Data/Special Handling:**

level C

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.



**CES Environmental  
Services, Inc.**

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
http://www.cesenvironmental.com  
TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

22

**SECTION 1: Generator Information**

Company: Weatherford International Ltd.  
Address: 7721 Pinemont Drive  
City, State, Zip: Houston, TX 77040  
Contact: Hugo Ybarra Title: Asset Coordinator  
Phone No: 713-580-9743 Fax No: 713-580-9797  
24/hr Phone: CES-713-676-1460  
U.S. EPA I.D. No: CESQG  
State I.D. CESQ SIC Code:

**SECTION 2: Billing Information - ☒ Same as Above**

Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Contact: \_\_\_\_\_ Title: \_\_\_\_\_  
Phone No: \_\_\_\_\_ Fax No: \_\_\_\_\_

**SECTION 3: General Description of the Waste**

Name of Waste: Super Dry

Detailed Description of Process Generating Waste: Material used to clean pipeline for final rinse and drying

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: Clear

Odor: none

Specific Gravity (water=1): 1.53

Density: 9.5 lbs/gal

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☒ Tote ☐ Truck ☐ Other (explain)

Container Size: \_\_\_\_\_ 500 gal \_\_\_\_\_

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☒ Yearly

Texas State Waste Code No: CESQ 2071

Proper U.S. DOT Shipping Name: Non-RCRA; Non-DOT Regulated Material

Class: NA UN/NA: NA PG: NA RQ: NA

Flash Point >150	pH 8-10	Reactive Sulfides 0mg/l	Reactive Cyanides 0mg/l	Solids <2%
Oil&Grease >1500mg/l	TOC >1500mg/l	Zinc 0mg/l	Copper 0mg/l	Nickel 0mg/l

**SECTION 4: Physical and Chemical Data**

<b>COMPONENTS TABLE</b>		<b>Concentration</b>	<b>Units</b>
The waste consists of the following materials		Ranges are acceptable	or %
Potassium Formate		60-85	%
Water		15-40	%
Scale, dirt		0-3	%
oil		0-1	%

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

Level C

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.

MSDS

**SECTION 7: Incompatibilities**

Please list all incompatibilities (if any):

oxidizers

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: ☒ X  
TCLP Volatiles: ☒ X  
TCLP Semi-Volatiles: ☒ X  
Reactivity: ☒ X  
Corrosivity: ☒ X  
Ignitability: ☒ X

**SECTION 9: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Lincoln Smith Date: 6/26/08

Printed Name/Title: LYNCOLE SMITH OPERATIONS MANAGER

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Robert Thayer

Additional Information: \_\_\_\_\_

Date: 6-27-08 ☒ Approved ☐ Rejected

Approval Number: 2858

**SECTION 10: Waste Receipt Classification Under 40 CFR 437**

Is this material a wastewater or wastewater sludge? ☐ YES ☒ NO

If 'Yes', complete this section.

***PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.***

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

- (1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.
- (2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L  
Chromium: 8.9 mg/L  
Copper: 4.9 mg/L  
Nickel: 37.5 mg/L

- (3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory  
☐ Oils Subcategory  
☒ Organics Subcategory

#### **SECTION 11: Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

1. **Base Pricing (including freight):**

175<sup>00</sup>/yote.  
Trans 70<sup>00</sup>/1472. Jute cleaning 75<sup>00</sup>

2. **Contamination Limits (maximum limit before surcharges apply):**

3. **Surcharge Pricing:**

4. **Special Testing Requirements:**

5. **Treatment and Handling Protocol:**

Class I - Sludge Box / after solidification  
Liquids box

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A      ☐ Subcategory B      ☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**7. Tests for Product Recovered/Recycled (if applicable):**

--

**8. Management for Product Recovered/Recycled (if applicable):**

--



**CLEARWATER**  
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Engineered Chemistry<sup>™</sup>

## Material Safety Data Sheet

# SUPER DRY 2000

HEALTH	1
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	

### 1. Product and Company Identification

<b>Material name</b>	<b>SUPER DRY 2000</b>
<b>Patent Number</b>	Not available
<b>Version No.</b>	4
<b>CAS #</b>	Mixture
<b>Manufacturer information</b>	Clearwater International L.L.C. 100 Leetsdale Industrial Drive Leetsdale, PA 15056 US CHEMTREC 1-800-424-9300/703-527-3887
<b>Emergency</b>	CHEMTREC 1-800-424-9300/703-527-3887
<b>Supplier information</b>	Clearwater International L.L.C. 100 Leetsdale Industrial Drive Leetsdale, PA 15056 US

### 2. Hazards Identification

<b>Emergency overview</b>	Health injuries are not known or expected under normal use. This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
<b>OSHA regulatory status</b>	This product is considered not hazardous under 29 CFR 1910.1200 (Hazard Communication).
<b>Potential environmental effects</b>	Ecological injuries are not known or expected under normal use.

### 3. Composition / Information on Ingredients

Non-hazardous components	CAS #	Percent
Potassium Formate	590-29-4	60 - 80

### 4. First Aid Measures

<b>First aid procedures</b>	
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.
<b>Skin contact</b>	Wash off with soap and water. Get medical attention if irritation develops or persists.
<b>Inhalation</b>	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
<b>Ingestion</b>	If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting without medical advice.
<b>General advice</b>	If you feel unwell, seek medical advice (show the label where possible).



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Page 1 of 5

Material Name: SUPER DRY 2000 - Clearwater Elmendorf

Version Number: 04

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EPAHO106001404



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Engineered Chemistry™

## 5. Fire Fighting Measures

<b>Flammable properties</b>	Not a fire hazard. The product is not flammable.
<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Water.
<b>Protection of firefighters</b>	
<b>Protective equipment and precautions for firefighters</b>	Use water spray to cool unopened containers. Cool containers with flooding quantities of water until well after fire is out.

## 6. Accidental Release Measures

<b>Personal precautions</b>	Local authorities should be advised if significant spillages cannot be contained. Keep unnecessary personnel away.
<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for containment</b>	Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.
<b>Methods for cleaning up</b>	<p>Large Spills: Dike far ahead of liquid spill for later disposal. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. After removal flush contaminated area thoroughly with water.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean contaminated surface thoroughly.</p> <p>Never return spills in original containers for re-use.</p>

## 7. Handling and Storage

<b>Handling</b>	Use only with adequate ventilation. Handle and open container with care. Wash thoroughly after handling.
<b>Storage</b>	Keep in a well-ventilated place. Store in accordance with local/regional/national/international regulation.

## 8. Exposure Controls / Personal Protection

<b>Personal protective equipment</b>	
<b>General hygiene considerations</b>	Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical & Chemical Properties

<b>Appearance</b>	Liquid.
<b>Color</b>	clear, colorless - brown
<b>Odor</b>	Not available.
<b>Odor threshold</b>	Not available
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>pH</b>	7.5 - 9
<b>Melting point</b>	249.8 °F (121 °C) estimated
<b>Freezing point</b>	Not available



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Page 2 of 5

Material Name: SUPER DRY 2000 - Clearwater Elmendorf

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Version Number: 04

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EPAHO106001405



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<b>Boiling point</b>	212 °F (100 °C) estimated
<b>Flash point</b>	N.A
<b>Evaporation rate</b>	Not available
<b>Flammability</b>	Not available.
<b>Flammability limits in air, upper, % by volume</b>	Not available
<b>Flammability limits in air, lower, % by volume</b>	Not available
<b>Vapor pressure</b>	Not available
<b>Vapor density</b>	Not available
<b>Specific gravity</b>	1.53 - 1.54
<b>Relative density</b>	1.5348 g/cm3 estimated
<b>Solubility (water)</b>	Not available
<b>Partition coefficient (n-octanol/water)</b>	Not available
<b>Auto-ignition temperature</b>	Not available
<b>Decomposition temperature</b>	Not available

#### 10. Chemical Stability & Reactivity Information

<b>Chemical stability</b>	Stable at normal conditions.
<b>Incompatible materials</b>	None known.

#### 11. Toxicological Information

##### Component analysis - LD50

##### Toxicology Data - Selected LD50s and LC50s

Potassium Formate      590-29-4      Oral LD50 Mouse: 5500 mg/kg

<b>Sensitization</b>	Not expected to be hazardous by OSHA criteria.
<b>Chronic effects</b>	Not expected to be hazardous by OSHA criteria.
<b>Carcinogenicity</b>	Not expected to be hazardous by OSHA criteria.
<b>Neurological effects</b>	Not expected to be hazardous by OSHA criteria.
<b>Further information</b>	This product has no known adverse effect on human health.

#### 12. Ecological Information

<b>Ecotoxicity</b>	This product has no known eco-toxicological effects.
--------------------	--

#### 13. Disposal Considerations

<b>Disposal instructions</b>	This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose in accordance with all applicable regulations.
------------------------------	--



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Page 3 of 5

Material Name: SUPER DRY 2000 - Clearwater Elmendorf

Version Number: 04

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EPAHO106001406



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## 14. Transport Information

### Department of Transportation (DOT) Requirements

Not regulated as dangerous goods.

### Canadian Transportation of Dangerous Goods (TDG) Requirements

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

## 15. Regulatory Information

### Labelling

#### Contains

Potassium Formate

### US federal regulations

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

CERCLA/SARA Hazardous Substances - Not applicable.

### Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous  
chemical No

### CERCLA (Superfund) reportable quantity

None

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### Hazard categories

Immediate Hazard - No  
Delayed Hazard - Yes  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

#### Section 302 extremely hazardous substance

No

#### Section 311 hazardous chemical

Yes

### Inventory status

#### Country(s) or region

#### Inventory name

#### On inventory (yes/no)\*

Canada

Domestic Substances List (DSL)

Yes

Canada

Non-Domestic Substances List (NDSL)

No

Europe

European Inventory of New and Existing Chemicals (EINECS)

Yes

Europe

European List of Notified Chemical Substances (ELINCS)

No

United States & Puerto Rico

Toxic Substances Control Act (TSCA) Inventory

Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

### State regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.



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## 16. Other Information

### HMIS® ratings

Health: 1  
Flammability: 1  
Physical hazard: 0

### NFPA ratings

Health: 1  
Flammability: 1  
Instability: 0

### Prepared by

Naser S. Hussaini  
515 Post Oak Blvd  
+1-713-693-7706

### Disclaimer

THIS PRODUCT'S HEALTH AND SAFETY INFORMATION IS PROVIDED TO ASSIST OUR CUSTOMERS IN ASSESSING COMPLIANCE WITH HEALTH, SAFETY AND ENVIRONMENTAL REGULATIONS. THE INFORMATION CONTAINED HEREIN IS BASED ON DATA AVAILABLE TO US, AND IS BELIEVED TO BE ACCURATE, ALTHOUGH NO GUARANTEE OR WARRANTY IS PROVIDED OR IMPLIED BY THE COMPANY IN THIS RESPECT. SINCE THE USE OF THIS PRODUCT IS WITHIN THE EXCLUSIVE CONTROL OF THE USER, IT IS THE USER'S RESPONSIBILITY TO DETERMINE THE CONDITIONS OF SAFE USE. SUCH CONDITIONS MUST COMPLY WITH ALL GOVERNMENTAL REGULATIONS.

### MSDS sections updated

Product and Company Identification: Product and Company Identification  
Hazards Identification: Specific hazards  
Other Information: Disclaimer



...A Weatherford Company

Page 5 of 5

Material Name: SUPER DRY 2000 - Clearwater Elmendorf

Version Number: 04

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EPAHO106001408

2859

Nucor Steel Jewett Division



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 6/27/2008

Dear Michael Shulz

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2859

**Expiration Date** 6/27/2010

**Generator:** Nucor Steel Jewett Division

**Address:** 8812 Hwy 79 West  
Jewett, TX 75846

### Waste Information

**Name of Waste:** Used oil

**TCEQ Waste Code #:** Recycle

**Container Type:**

**Detailed Description of Process Generating Waste:**

Various used machine and equipment oil

**Color:** black

**Odor:** mild

**pH:** na

**Physical State:**

**Incompatibilities:** oxidizers

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

LRP  
Waste oil + water is a liquid. Instructions state

to heat the trailer until the material is liquified. the profile is contradictory and must be clarified and corrected. Corrected PFT



CES Environmental  
Services, Inc.

JW  
JKRust

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit No: 30948

U.S. EPA ID No: TXD008950461 ISWR No: 30900

**SECTION 1: Material Producer Information**

Company: Nucor Steel Texas  
Address: 8812 Hwy 79 West  
City, State, Zip: Jewett TX 75846  
Contact: Michael Schulz Title: Environmental Engineer  
Phone No: (903) 626 - 4461 Fax No: (903) 626 - 6290  
24/hr Phone: (903) 626 - 4461  
U.S. EPA I.D. No: SIC Code:  
State I.D.:

**SECTION 2: Billing Information - ☐ Same as Above**

Company: Nucor Steel Texas  
Address: P.O. Box 126  
City, State, Zip: Jewett TX. 75846  
Contact: Michael Schulz Title: Environmental Engineer  
Phone No: (903) 626 - 4461 Fax No: (903) 626 - 6290

**SECTION 3: General Description of the Material / Product**

Name of Material / Product: Used Oil

Detailed Description of Process Generating or Producing the Material / Product: Various used machine and equipment oil

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: black

Odor: mild

Specific Gravity (water=1): 1.1

Density: 8.614 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)

Container Size: 5000

Frequency: ☐ Weekly ☒ Monthly ☐ Quarterly ☐ Yearly

Number of Units (containers): 3 Other: RECYCLE

Proper U.S. DOT Shipping Name:

Class: na

UN/NA: na

PG: na

RQ: na

Flash Point >140	pH N/A	N/A	N/A	Solids 0%
Oil & Grease n/amg/l 715/10	TOC n/amg/l	Zinc n/amg/l	Copper n/amg/l	Nickel n/amg/l

#### SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	Concentration	Units
The material / product consists of the following materials	Ranges are acceptable	or %
Waste Oil	80-100	%
Water	0-20	%

#### SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.

none

#### SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.

ces eval#08-042

#### SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

none

#### SECTION 8: Material Producer's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature:

Date: 6/11/08

Printed Name/Title:

Michael Schulte, Environmental Engineer

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Technical Manager:

Robert Thanga

Date:

6-27-08

Approved

Rejected

Approval Number:

2859



4904 Griggs Road  
Houston, TX 77021  
Phone: 713-676-1460  
Fax: 713-676-1676

March 23, 2008

Michael Schulz  
Nucor Steel  
Jewett, TX. 75846

**Re: Waste Management & Transportation Quote**

Dear Mr. Schulz:

Thank you for your interest in CES Environmental Services, Inc. and our waste management and transportation services. Please find below our proposed scope of service and associated pricing for your consideration.

**Scope of Service**

- CES will provide transportation & product management for Nucor Steel oil waste at our approved disposal facility in accordance with federal, state, and local regulations.
- CES will provide for the profile, waste manifest, labels, and appropriate shipping documents.

**Estimated Costs**

Description of Service	Price	
Waste Oil (< 10% water)	.51 credit	per gallon
Waste Oil (10% - 20% water)	.41 credit	per gallon
Waste Oil (20% - 30% water)	.31 credit	per gallon
Transportation	\$70.00	per hour portal / portal

**Conditions/Assumptions**

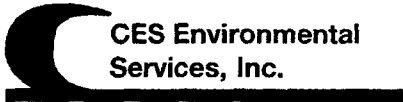
- The above pricing is based on time and materials, the customer's invoice will reflect the actual quantities utilized on the project.
- Fuel surcharges will be charged according to the national average diesel price as published by the US Department of Energy. Current fuel surcharge is 26.5% of transportation rate. Disposal pricing includes all applicable state taxes and/or fees associated with the disposal of this waste material. These rates and terms will be effective through December 31, 2008. Prices subject to change with 30 days notice.

It is our sincere hope that you find our proposed scope of service and associated pricing appealing and will consider utilizing the services offered by CES Environmental Service, Inc. If you have any questions or comments or would like to begin service, please feel free to contact me at 713-550-6344.

Sincerely,

Joe Wilson  
Account Manager  
CES Environmental  
(713) 550-6344





**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

**2. Contamination Limits (maximum limit before surcharges apply):**

**3. Surcharge Pricing:**

**4. Special Testing Requirements:**

% oil, flash, Chlor d test, % solids on oil; test water for phenol, pH

**5. Treatment and Handling Protocol:**

base oil & black oil per Gary P.

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A      ☐ Subcategory B      ☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**7. Tests for Product Recovered/Recycled (if applicable):**

--

**8. Management for Product Recovered/Recycled (if applicable):**

--

2860  
Andergauge Drilling Systems



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 6/30/2008

Dear Keith Caulfield

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2860

**Expiration Date** 6/30/2010

**Generator:** Andergauge Drilling Systems  
**Address:** 6806 Willowbrook Park Drive  
Houston, TX 77066

### Waste Information

**Name of Waste:** Zinc filters

**TCEQ Waste Code #:**

**Container Type:**

**Detailed Description of Process Generating Waste:**

Spent filters for the removal of metals from a wastewater recycling facility

**Color:** varies

**Odor:** mild

**pH:** neutra;

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**

level d ppe

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

JUN-20-2008 11:20

CES Environmental Service

713 676 1676

P.02/09



4904 Griggs Road, Houston, TX 77021

Phone: (713) 676-1460 Fax: (713) 676-1676

<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950451 ISWR Number: 30900

**SECTION 1: Generator Information**

Company: Andergauge Drilling Systems  
 Address: 5806 Willowbrook Park Drive  
 City: Houston State: TX Zip: 77066  
 Contact: Kleth Cuffield Title: Manager  
 Phone Number: 832-422-4025 Fax Number: 832-422-4006  
 24/hr Phone Number: 832-422-4025  
 US EPA ID No: TXCESQG  
 State ID No: CESQG SIC Code: \_\_\_\_\_

**SECTION 2: Billing Information -** ☐ Same as Above

Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Contact: \_\_\_\_\_ Title: \_\_\_\_\_  
 Phone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_

**SECTION 3: General Description of the Waste**Name of Waste: Zinc Filters

Detailed Description of Process Generating Waste:

Spent filters for the removal of metals from a waste water recycling facility.

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☒ Solid ☐ Filter Cake ☐ Combination

Color: Varies Odor: MildSpecific Gravity (water=1): 8-1 Density: 8.9-lbs/galDoes this material contain any total phenolic compounds? ☐ Yes ☒ NoDoes this material contain any para substituted phenolic compounds? ☐ Yes ☒ NoIs the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phaseContainer Type: ☒ Drum ☐ Tote ☐ Truck ☒ Other (explain)Frequency: ☐ Weekly ☒ Monthly ☐ Yearly ☐ One-TimeQuantity: 10 -10-Jan

LES Environmental Service

113 0/0 10/0

P. U3/09

☐ Yes ☒ No

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)  
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009  
☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☒ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No

If "Yes", then please list ALL applicable codes:

**Texas State Waste Code Number:**

~~TX~~CESQ3191

**Proper US DOT Shipping Name:**

### Non-RCRA, Non-DOT Regulated Zinc Filters

Class: Na UN/NA: Na PG: Na RQ: Na

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>200		No		0 mg/l		0 mg/l		100 %	
Oil & Grease		TOC		Zinc		Copper		Nickel	
No	mg/l	No	mg/l	No	mg/l	No	mg/l	No	mg/l

#### SECTION 4: Physical and Chemical Data

[illegible]

JUN-20-2008 11:20

CES Environmental Service

713 676 1676

P.04/09

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

Level D PPE  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_**SECTION 6: Attached Supporting Documents**List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. TCLP Analysis  
\_\_\_\_\_  
\_\_\_\_\_**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

None  
\_\_\_\_\_  
\_\_\_\_\_**SECTION 8: Generator's Knowledge Documentation**Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals: \_\_\_\_\_

TCLP Volatiles: \_\_\_\_\_

TCLP Semi-Volatiles: \_\_\_\_\_

Reactivity: \_\_\_\_\_

Material is solid

Corrosivity: \_\_\_\_\_

Material is solid

Ignitability: \_\_\_\_\_

Material is solid

**SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)**

Is this material a wastewater or wastewater sludge?

☐ YES☒ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

**SECTION 10: Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

**SECTION 11: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☒ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Date: 6/24/2008

6/20/2008

Printed Name/Title: Travis Toman HSE Coordinator

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Date: 6-30-08☒ Approved☐ RejectedApproval Number: 2860

**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

\$85/cy box  
Trans \$69/hr plus FSC

**2. Contamination Limits (maximum limit before surcharges apply):**

None

**3. Surcharge Pricing:**

None

**4. Special Testing Requirements:**

Make sure waste fits profile

**5. Treatment and Handling Protocol:**

Class 1 solids to landfill

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☐ Subcategory B

☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**7. Tests for Product Recovered/Recycled (if applicable):**

Na

**8. Management for Product Recovered/Recycled (if applicable):**

Na

# Mercury Environmental Services, Inc.

6913 HWY 225, Deer Park, TX 77536

Phone: (281)-476-4534 Fax: (281)-476-4406

**CES Environmental Services**  
4904 Griggs Rd  
Houston, TX 77021

Phone: (713) 676-1460

Fax: (713) 676-1676

Attn: Dan Bowman

## - CERTIFICATE OF RESULTS -

MES Lab#: 8060143

Client Sample ID: Filter Paper

Extended ID: Andergauge Willowbrook Industrial Park / PO#0608-14

Sample Collect Date: 5/30/2008 @ 3:30:00 PM

Sample Type: Grab

Sample Receipt Date: 6/5/2008 @ 3:27:00 PM

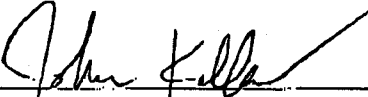
### Test Group / Method

TCLP Volatiles					Analyst: TFR	
Method: SW-846 8260B	MDL	RL	Result	Units	Date / Time	
Vinyl chloride	0.10	0.2	< 0.10	mg/L	6/11/2008 /	10:46 AM
1,1-Dichloroethene	0.05	0.7	< 0.05	mg/L	6/11/2008 /	10:46 AM
2-Butanone	0.50	200	< 0.50	mg/L	6/11/2008 /	10:46 AM
Chloroform	0.05	6	< 0.05	mg/L	6/11/2008 /	10:46 AM
Carbon tetrachloride	0.05	0.5	< 0.05	mg/L	6/11/2008 /	10:46 AM
1,2-Dichloroethane	0.05	0.5	< 0.05	mg/L	6/11/2008 /	10:46 AM
Benzene	0.05	0.6	< 0.05	mg/L	6/11/2008 /	10:46 AM
Trichloroethene	0.05	0.5	< 0.05	mg/L	6/11/2008 /	10:46 AM
Tetrachloroethene	0.05	0.7	< 0.05	mg/L	6/11/2008 /	10:46 AM
Chlorobenzene	0.05	100	< 0.05	mg/L	6/11/2008 /	10:46 AM
1,4-Dichlorobenzene	0.05	7.5	< 0.05	mg/L	6/11/2008 /	10:46 AM
Hexachlorobutadiene	0.05	0.5	< 0.05	mg/L	6/11/2008 /	10:46 AM
TCLP Sem-Volatiles					Analyst: TFR	
Method: SW-846 8270C	MDL	RL	Result	Units	Date / Time	
Pyridine	0.10	5	< 0.10	mg/L	6/11/2008 /	10:08 AM
1,4-Dichlorobenzene	0.10	7.5	< 0.10	mg/L	6/11/2008 /	10:08 AM
o-Cresol	0.10	200	< 0.10	mg/L	6/11/2008 /	10:08 AM
m+p-Cresol	0.10	200	< 0.10	mg/L	6/11/2008 /	10:08 AM
Hexachloroethane	0.10	3	< 0.10	mg/L	6/11/2008 /	10:08 AM
Nitrobenzene	0.10	2	< 0.10	mg/L	6/11/2008 /	10:08 AM
Hexachlorobutadiene	0.10	0.5	< 0.10	mg/L	6/11/2008 /	10:08 AM
2,4,6-Trichlorophenol	0.10	2	< 0.10	mg/L	6/11/2008 /	10:08 AM
2,4,5-Trichlorophenol	0.10	400	< 0.10	mg/L	6/11/2008 /	10:08 AM
2,4-Dinitrotoluene	0.10	0.13	< 0.10	mg/L	6/11/2008 /	10:08 AM
Hexachlorobenzene	0.10	0.13	< 0.10	mg/L	6/11/2008 /	10:08 AM
Pentachlorophenol	1.00	100	< 1.00	mg/L	6/11/2008 /	10:08 AM

**- CERTIFICATE OF RESULTS -****MES Lab#:** 8060143**Client Sample ID:** Filter Paper**Extended ID:** Andergauge Willowbrook Industrial Park / PO#0608-14**Sample Collect Date:** 5/30/2008 @ 3:30:00 PM**Sample Type:** Grab**Sample Receipt Date:** 6/5/2008 @ 3:27:00 PM

TCLP Metals (8)					Analyst: JA	
Method: SW-846 6010B					Date / Time	
Arsenic	MDL	RL	Result	Units		
	0.050	5	< 0.050	mg/L	6/10/2008 / 4:08 PM	
Barium	0.002	100	0.727	mg/L	6/10/2008 / 4:08 PM	
Cadmium	0.004	1	< 0.004	mg/L	6/10/2008 / 4:08 PM	
Chromium	0.007	5	< 0.007	mg/L	6/10/2008 / 4:08 PM	
Lead	0.010	5	< 0.010	mg/L	6/10/2008 / 4:08 PM	
Selenium	0.050	1	< 0.050	mg/L	6/10/2008 / 4:08 PM	
Silver	0.002	5	< 0.002	mg/L	6/10/2008 / 4:08 PM	
TCLP Mercury					Analyst: JA	
Method: SW 846 7470A					Date / Time	
Mercury	MDL	RL	Result	Units		
	0.0002	0.2	< 0.0002	mg/L	6/10/2008 / 4:29 PM	

Flags: H: Exceeds "High Limit" L: Below "Low Limit" RL=regulatory limit

  
John Keller, Ph.D., Lab Director

Tuesday, June 17, 2008

Date

8060143

**MERCURY ENVIRONMENTAL SERVICES  
QA/QC REPORT****SURROGATE SPIKE RECOVERY FOR VOLATILES****% REC**

Dibromofluoromethane	101.2
Toluene-d8	100.7
4-Bromofluorobenzene	96.0

**SURROGATE SPIKE RECOVERY FOR SEMIVOLATILES****% REC**

2-Fluorophenol	38.4
Phenol-d6	51.2
Nitrobenzene-d5	44.6
2-Fluorobiphenyl	49.7
2,4,6-Tribromophenol	47.3
p-Terphenyl-d14	23.8

**Key to QA Abbreviations**

MS=Matrix Spike  
MSD=Matrix Spike Duplicate  
RPD=Relative Percent Deviation  
MB=Method Blank

LCS=Laboratory Control Standard  
CCV=Continuing Calibration Verification  
%Rec=Percent Recovery

Signature: **John Keller / Laboratory Director**

June 17, 2008


**Mercury Environmental Services, Inc.**

EPAHO106001427

1 COMPANY NAME: (BILL TO:) CEC  
COMPANY ADDRESS: 4904 GRIFFIN ROAD  
CITY HOUSTON STATE TX ZIP 77021  
CONTACT PERSON'S NAME: DAN BOWMAN  
CONTACT PERSON'S PHONE: (213) 676-1460 FAX #: (713) 676-1676

2	YOUR PROJECT NO:	YOUR P.O. #:	YOUR PROJECT NAME:
		0608-14	ANDERGATGE
PROJECT ADDRESS:			
CLIFTONBROOK INDUSTRIAL PARK			

[illegible]

6	PERSON TAKING SAMPLE SIGNATURE (a. - Print Name & b. - Sign.):			
	a. <i>Quinn Tarrington</i> 			
7	RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)
	METHOD OF PAYMENT	SHIPPED BY: (Signature)	COURIER (Signature)	

**8** Sample Remainder Disposal

☐ Return Sample Remainder To Client Via \_\_\_\_\_

**MES**

## - CHAIN OF CUSTODY

**1-800-771-4MES**

**(281) 476-4534**

**Mercury Environmental Services**  
6913 Hwy. 225 • Deer Park, TX 77536

**Fax (281)-476-4406**

[illegible]

Form N MES - CGFH

**WHITE & CANARY - Shipped with Sample**

**PINK – Retained by Customer**

**WHITE - Returned with Report**

2861 NuStar Terminals  
Partners TXLP.

**URGENT****RINECO**

819 Vulcan Rd. Building 300 - Haskell  
Benton, AR 72015  
501- 778-9089 (FAX) 501-778-8505

**URGENT****Manifest Correction Report**

DATE: Monday July 7, 2008 3:34PM  
GENERATOR: NuStar Terminals Partners TX L.P.  
CITY /STATE: Texas City, TX REGION: S02  
GENERATOR CONTACT: Bob Hill FAX: 409-948-4460  
MANIFEST #: 002176720FLE  
Correction # 36754

**CORRECTIONS NEEDED:**

Block 9b (DOT) should read: Non Regulated Material.  
Block 13 (Waste Codes) should read: 00282051.  
Block 14 should read: 0806-09806.

profile  
2861

**Stacie Smith****RINECO CUSTOMER SERVICE REP****RINECO REGULATORY APPROVAL**

If you are a broker, your signature below is certifying that you are authorized as an agent of the generator by contract or agreement to make additions or corrections to Manifests and/or Land Disposal Restrictions.

Generators and/or Brokers please complete this portion

COMPANY NAME NuStar Terminals Partners TX L.P.  
PRINT OR TYPE NAME Robert S. Hill, III DATE: 7/7/08  
SIGNATURE: Robert S. Hill, III

Your signature allows RINECO to make necessary changes to your paperwork. Please fax back as soon as possible today, to prevent any delays in receiving your original manifest, CD/R.

2861



4904 Griggs Road, Houston, TX 77021  
 Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

fb

**SECTION 1: Generator Information**

Company: NuStar Terminals Partners TX L.P.  
 Address: 201 Main Dock Road  
 City: Texas City State: TX Zip: 77592  
 Contact: Bob Hill Title: HSE Specialist  
 Phone Number: 409-948-8254 Fax Number: 409-948-4460  
 24/hr Phone Number: 281-750-1486  
 US EPA ID No: TXD096036561  
 State ID No: 31060 SIC Code: 5171

**SECTION 2: Billing Information - ☐ Same as Above**

Company: Rineco Chemical  
 Address: P.O. Box 729  
 City: Benton State: AR Zip: 72018  
 Contact: Angela Brown Title: Non-Fuels Chemist  
 Phone Number: 800-377-4692 Fax Number: 501-778-8505

**SECTION 3: General Description of the Waste**

Name of Waste: Oily Water from Station  
 Detailed Description of Process Generating Waste:  
 rinse out of tank

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: brown to black Odor: petroleum (slight, if any)

Specific Gravity (water=1): 0.95-1.05 Density: 7.9-8.75 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2879	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☒ Yearly ☐ One-Time

Quantity: 1-5 tankers



**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

N/A

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste

approval package. 2 pages of analysis attached, Job # 351885, Lab Sample ID# 351885-5

**SECTION 7: Incompatibilities**

Please list ALL incompatibilities (if any):

N/A

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals: see analysis

TCLP Volatiles: see analysis

TCLP Semi-Volatiles: see analysis

Reactivity: see analysis

Corrosivity: see analysis

Ignitability: see analysis

**SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)**

Is this material a wastewater or wastewater sludge?  
If 'Yes', complete this section.

☐ YES ☒ NO

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.**

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent unoxidizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☒ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the inorganics subcategory.

- ☐ Metals Subcategory
- ☒ Oils Subcategory
- ☐ Organics Subcategory

**SECTION 10: Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

**SECTION 11: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☒ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: \_\_\_\_\_

*Robert B. Hill, III*

Date: \_\_\_\_\_

*6/19/08*

Printed Name/Title: \_\_\_\_\_

*Robert B. Hill, III*

**CES USE ONLY (DO NOT WRITE IN THIS SPACE)**

Compliance Officer: \_\_\_\_\_

Date: \_\_\_\_\_

☐ Approved

☐ Rejected

Approval Number: \_\_\_\_\_

**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

\$0.10 / gal + \$70/hr trans + fsc

**2. Contamination Limits (maximum limit before surcharges apply):**

up to 10% solids - std per rate sheet.

**3. Surcharge Pricing:**

std per rate sheet.

**4. Special Testing Requirements:**

TOC, pH, metals, % oil, solids

**5. Treatment and Handling Protocol:**

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☒ Subcategory B

☐ Subcategory C

**7. Tests for Product Recovered/Recycled (if applicable):**

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**8. Management for Product Recovered/Recycled (if applicable):**

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LABORATORY TEST RESULTS							
Job Number: 351885		Date: 04/15/2008					
CUSTOMER: NuStar Energy, LP		PROJECT: LIFT STATION SAMPLES					
ATTN: Robert Hill							
Customer Sample ID: SEPERATOR SLUDGE		Laboratory Sample ID: 351885-5					
Date Sampled.....: 03/31/2008		Date Received.....: 03/31/2008					
Time Sampled.....: 14:00		Time Received.....: 17:42					
Sample Matrix.....: Sludge							
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	FLAGS	REPORTING LIMIT	UNITS	DATE	TECH
ASTM D93-85	Ignitability (Flashpoint), Sludge	>212			degrees F	04/03/08	daw
SW-846 1311	TCLP Herbicide Analysis, Sludge	Complete				04/03/08	wkc
SW-846 1311	TCLP Metals Analysis, Sludge	Complete				04/03/08	wkc
SW-846 1311	TCLP Pesticide Analysis, Sludge	Complete				04/03/08	wkc
SW-846 1311	TCLP Semi-Volatiles Analysis, Sludge	Complete				04/03/08	wkc
TNRCC TX-1005	TNRCC 1005 Extraction (Ultrasonic) TNRCC 1005 Extraction, Sludge	Complete				04/14/08	lvp
TNRCC 1005	Direct Analytical TPH Method TX 1005						
	Petroleum Hydrocarbons C6 - C12, Sludge	ND		1000	mg/Kg	04/15/08	kp
	Petroleum Hydrocarbons C12 - C28, Sludge	9560		1000	mg/Kg	04/15/08	kp
	Petroleum Hydrocarbons C28 - C35, Sludge	2230		1000	mg/Kg	04/15/08	kp
	Petroleum Hydrocarbons C6 - C35, Sludge	11800		1000	mg/Kg	04/15/08	kp
Various Method	Miscellaneous Subcontract Methods						
	Subcontract Method Analysis, Sludge	see attached				04/14/08	deb
SW-846 7.3	Reactivity, Cyanide, Soil	<10.0		10.0	mg/Kg	04/02/08	gcw
SW-846 7.3	Reactivity, Sulfide, Soil	<50.0		50.0	mg/Kg	04/02/08	gcw
SW-846 9045C	Soil pH, Soil	7.24		0.01	pH Units	04/03/08	sur
SW-846 1311	Zero Head Space (ZHE) Extraction, Solid	Complete				04/03/08	wkc
SW-846 7470A	Mercury (Hg), TCLP	ND		1.00	ug/L	04/07/08	dcl
SW-846 3010A	Acid Digestion, TCLP	Complete				04/04/08	rim
SW-846 6010B	Metals Analysis (ICAP Trace)						
	Arsenic (As), TCLP	ND		0.100	mg/L	04/07/08	srp
	Barium (Ba), TCLP	0.101		0.100	mg/L	04/07/08	srp
	Cadmium (Cd), TCLP	ND		0.100	mg/L	04/07/08	srp
	Chromium (Cr), TCLP	ND		0.100	mg/L	04/07/08	srp
	Lead (Pb), TCLP	ND		0.100	mg/L	04/07/08	srp
	Selenium (Se), TCLP	ND		0.200	mg/L	04/07/08	srp
	Silver (Ag), TCLP	ND		0.100	mg/L	04/07/08	srp
SW-846 8151A	Chlorinated Herbicides by GC						
	2,4-D, TCLP	ND		2.0	ug/L	04/07/08	kp
	2,4,5-TP (Silvex), TCLP	ND		2.0	ug/L	04/07/08	kp
SW-846 8081A	Organochlorine Pesticide Analysis						
	gamma-BHC (Lindane), TCLP	ND		0.25	ug/L	04/09/08	wec

LABORATORY TEST RESULTS							
Job Number: 351885		Date: 04/15/2008					
CUSTOMER: NuStar Energy, LP		PROJECT: LIFT STATION SAMPLES					
		ATTN: Robert Hill					
Customer Sample ID: SEPERATOR SLUDGE		Laboratory Sample ID: 351885-5					
Date Sampled.....: 03/31/2008		Date Received.....: 03/31/2008					
Time Sampled.....: 14:00		Time Received.....: 17:42					
Sample Matrix.....: Sludge							
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	FLAGS	REPORTING LIMIT	UNITS	DATE	TECH
SW-846 8270C	Chlordane, TCLP	ND		0.50	ug/L	04/09/08	wec
	Endrin, TCLP	ND		0.50	ug/L	04/09/08	wec
	Heptachlor, TCLP	ND		0.25	ug/L	04/09/08	wec
	Heptachlor epoxide, TCLP	ND		0.25	ug/L	04/09/08	wec
	Methoxychlor, TCLP	ND		2.5	ug/L	04/09/08	wec
	Toxaphene, TCLP	ND		25	ug/L	04/09/08	wec
	Semivolatile Organics						
	2,4-Dinitrotoluene, TCLP	ND		25	ug/L	04/09/08	maz
	Hexachlorobenzene, TCLP	ND		25	ug/L	04/09/08	maz
	Hexachlorobutadiene, TCLP	ND		25	ug/L	04/09/08	maz
	Hexachloroethane, TCLP	ND		25	ug/L	04/09/08	maz
	Nitrobenzene, TCLP	ND		25	ug/L	04/09/08	maz
	2-Methylphenol (o-Cresol), TCLP	ND		25	ug/L	04/09/08	maz
	4-Methylphenol (p-Cresol), TCLP	ND		25	ug/L	04/09/08	maz
	Pentachlorophenol, TCLP	ND		120	ug/L	04/09/08	maz
	2,4,5-Trichlorophenol, TCLP	ND		25	ug/L	04/09/08	maz
	2,4,6-Trichlorophenol, TCLP	ND		25	ug/L	04/09/08	maz
	Pyridine, TCLP	ND		25	ug/L	04/09/08	maz
SW-846 8260B	Volatile Organics						
	Benzene, TCLP	ND		100	ug/L	04/04/08	klv
	Carbon Tetrachloride, TCLP	ND		100	ug/L	04/04/08	klv
	Chlorobenzene, TCLP	ND		100	ug/L	04/04/08	klv
	Chloroform, TCLP	ND		100	ug/L	04/04/08	klv
	1,4-Dichlorobenzene, TCLP	ND		100	ug/L	04/04/08	klv
	1,2-Dichloroethane, TCLP	ND		100	ug/L	04/04/08	klv
	1,1-Dichloroethene, TCLP	ND		100	ug/L	04/04/08	klv
	Tetrachloroethene, TCLP	ND		100	ug/L	04/04/08	klv
	Trichloroethene, TCLP	ND		100	ug/L	04/04/08	klv
	Vinyl Chloride, TCLP	ND		200	ug/L	04/04/08	klv
	Methyl Ethyl Ketone (2-Butanone), TCLP	ND		200	ug/L	04/04/08	klv



4904 Griggs Road  
Houston, TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1676

To: Joy Baker  
Cc: Keli Lofton, Gary Peterson, Prabhaker

Date: 06/23/08

From: Miles Root

Lab Memo: 08-113

Subject: **Rineco Evaluation 0608-46**

A sample of waste water from Rineco, generated by NuStar has been evaluated for processing at CES. This sample is evaluation 0608-43 and is stated to be oily rinse water from a tank. Overall, this water looks good for processing and should present minimal handling issues.

This sample does have a few drops of what appear to be oil on top of the water. There is not enough to even call it an oil sheen. Upon treating, these drops of oil are no longer visible. A spinout of this material with a centrifuge does not show any oil layer. Flash point on this sample is greater than 140 deg F. It does have a dark brown appearance when shaken, but the water becomes clear when allowed to sit and the 5% solids are allowed to settle out. There are no phenols and the metals and TOC are low. The water treats easily with our standard treat and we should have no issues. While the sample does have a peculiar odor, it is not particularly offensive and should require no special handling.

Pricing should be at least \$0.12/gal to cover basic costs with an additional \$0.04/gal for solids. The table below summarizes the analytical testing.

Rineco Evaluation 0608-46	
Neat Sample	
pH	7
Solids, vol%	5
Treatability	Easy
Flash Point, Deg F	>140
Oil, vol%	Trace
Treated Sample	
TOC, mg/L	2251
Phenols, ppm	0
Metals	
Cd	0.030
Cr	0.008
Cu	0.099
Ni	0.512
Zn	0.023

2862  
DXI Industries Inc



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/3/2008

Dear Dean Artero or Todd Conner

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2862

**Expiration Date** 7/1/2010

**Generator:** DXI Industries, Inc.

**Address:** 1919 Jacintoport Blvd  
Houston, TX 77015

### Waste Information

**Name of Waste:** Diesel fuel contaminated with water

**TCEQ Waste Code #:** Recycle

**Container Type:**

**Detailed Description of Process Generating Waste:**

Diesel spill mixed with rain water

**Color:** tan

**Odor:** diesel

**pH:** 7

**Physical State:**

**Incompatibilities:** oxidizers

**Safety Related Data/Special Handling:**

std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.

JUN-30-2008 10:06

CES ENVIROMENTAL

7137400664

P.002

YRP  
OK

4904 Griggs Road, Houston, TX 77021  
 Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com>

TCEQ Industrial Solid Waste Permit Number: 30948

U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

CB

**SECTION 1: Generator Information**

Company: DFT Industries  
 Address: 1919 Jacintopert Blvd.  
 City: Houston State: TX Zip: 77015  
 Contact: Jay Montanio Title: \_\_\_\_\_  
 Phone Number: 281-457-4835 Fax Number: \_\_\_\_\_  
 24/hr Phone Number: \_\_\_\_\_  
 US EPA ID No: TXD988026282  
 State ID No: \_\_\_\_\_ SIC Code: \_\_\_\_\_

**SECTION 2: Billing Information**☐ Same as Above

Company: C4 Environmental Services  
 Address: PO Box 692375  
 City: Houston State: TX Zip: 77269  
 Contact: Kelly Title: \_\_\_\_\_  
 Phone Number: 281-459-9992 Fax Number: 281-459-9960

**SECTION 3: General Description of the Waste**

Name of Waste: diesel fuel contaminated water  
 Detailed Description of Process Generating Waste:

☒ Diesel Spill mixed with Rain Water

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: tan Odor: diesel

Specific Gravity (water=1): ~ 1.0 Density: 8 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No

Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☐ Single-phase ☒ Multi-phase

Container Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☐ Yearly ☒ One-Time

Quantity: 2000 gal



JUN-30-2008 10:06

CES ENVIROMENTAL

7137488664

P.004

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

std**SECTION 6: Attached Supporting Documents**

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.

None**SECTION 7: Incompatibilities**

Please list ALL Incompatibilities (if any):

oxidizers**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals:

TCLP Volatiles:

TCLP Semi-Volatiles:

Reactivity:

Corrosivity:

Ignitability:

Generator Knowledge**SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)**

Is this material a wastewater or wastewater sludge?

☐ YES☒ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

**Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or ally sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☒ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

**SECTION 10 Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

**SECTION 11: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Todd ComerDate: 7-1-08Printed Name/Title: Todd Comer, C4 Env.

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Robert E. HargadDate: 7-1-08☒ Approved☐ RejectedApproval Number: 2862

Total P.005

EPAHO106001445



PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

• 15/gal

2. Contamination Limit (maximum limit before surcharges apply):

5000 TOC  
109% Solids

3. Surcharge Pricing:

03/gal 5000 TOC  
03/gal > 109% Solids

NOT ~~surcharge~~  
TO EXCEED 25¢

4. Special Testing Requirements:

On water phase check pH, TOC, phenols.

5. Treatment and Handling Protocol:

Take the top organic phase to Black Oil and water phase to waste water.

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A    ☐ Subcategory B    ☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY)!!!**

**7. Tests for Product Recovered/Recycled (if applicable):**

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**8. Management for Product Recovered/Recycled (if applicable)**

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2863

National Equipment Corporation



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/1/2008

Dear Tom Collier

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2863

**Expiration Date** 7/1/2010

**Generator:** National Equipment Corporation

**Address:** 1806 Buchanan Street  
Brenham, TX 77833

### Waste Information

**Name of Waste:** Coolant, oil, and water

**TCEQ Waste Code #:** Recycle

**Container Type:**

**Detailed Description of Process Generating Waste:**

Machine grinding coolant and equipment fluid changes and rainwater

**Color:** brown/clear

**Odor:** oil like

**pH:** neutral

**Physical State:**

**Incompatibilities:** oxidizers

**Safety Related Data/Special Handling:**

level d

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.



**CES Environmental  
Services, Inc.**

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
<http://www.cesenvironmental.com> 2863

TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

**SECTION 1: Generator Information**

Company: National Equipment Corporation  
Address: 1806 Buchanan Street  
City, State, Zip: Brenham, TX 77833  
Contact: Tom Collier Title: President  
Phone No: 979-830-8030 Fax No: 979-830-0983  
24/hr Phone: CES-713-676-1460  
U.S. EPA I.D. No: NA  
State I.D. NA SIC Code:

**SECTION 2: Billing Information - ☒ Same as Above**

Company:  
Address:  
City, State, Zip:  
Contact: Title:  
Phone No: Fax No:

**SECTION 3: General Description of the Waste**

Name of Waste: Coolant Oil and Water

Detailed Description of Process Generating Waste: Machine Grinding Coolant and equipment fluid changes and rainwater

Physical State: ☒ Liquid ☐ Sludge ☐ Powder  
☐ Solid ☐ Filter Cake ☐ Combination

Color: brown/Clear

Odor: oil like

Specific Gravity (water=1): .85-1.00

Density: 8 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para-substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☐ Single-phase ☒ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Container Size: 55 g

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☒ Yearly

Number of Units (containers): 3-5 Other: \_\_\_\_\_

Texas State Waste Code No: NA-Recyclable Material

Proper U.S. DOT Shipping Name: Non-RCRA; Non-DOT Regulated Material

Class: NA UN/NA: NA PG: NA RQ: NA

Flash Point >150	pH neutral	Reactive Sulfides 0mg/l	Reactive Cyanides 0mg/l	Solids <2%
Oil & Grease >1500mg/l	TOC 1500mg/l	Zinc 0mg/l	Copper 0mg/l	Nickel 0mg/l

**SECTION 4: Physical and Chemical Data**

The waste consists of the following materials	Ranges are acceptable	Units
Machine Coolant	10-40	%
Oil	2-30	%
Water	30-80	%
Dirt	0-2	%

**SECTION 5: Safety Related Data**

If the handling of this waste requires the use of special protective equipment, please explain.

Level D

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.

CES-Evaluation Report *note*

**SECTION 7: Incompatibilities**

Please list all incompatibilities (if any):

oxidizers

**SECTION 8: Generator's Knowledge Documentation**

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: ☒ X  
 TCLP Volatiles: ☒ X  
 TCLP Semi-Volatiles: ☒ X  
 Reactivity: ☒ X  
 Corrosivity: ☒ X  
 Ignitability: ☒ X

**SECTION 9: Generator's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☒ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: J P Collier

Date: 4-25-08

Printed Name/Title: TOM P COLLIER - PRES.

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Compliance Officer: <u>Rohit K. Sharma</u>	
Date: <u>7-1-08</u>	Approved <input checked="" type="checkbox"/> Rejected <input type="checkbox"/>
Approval Number: <u>2863</u>	

**SECTION 10: Waste Receipt Classification Under 40 CFR 437**Is this material a wastewater or wastewater sludge? ☒ YES ☐ NO

If 'Yes', complete this section.

**PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.****Metals Subcategory: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

**Oils Subcategory: Subpart B**

- ☐ Used oils
- ☒ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

**Organics Subcategory: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

- (1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.
- (2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L

Chromium: 8.9 mg/L

Copper: 4.9 mg/L

Nickel: 37.5 mg/L

- (3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

#### **SECTION 11: Additional Instructions**

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

**PROCESS FACILITY INFORMATION (CES USE ONLY!!)****1. Base Pricing (including freight):**

\$50.00/Drum

Transportation \$100.00 per trip plus FSC, Must be scheduled at same time as other pick-ups in Brenham

**2. Contamination Limits (maximum limit before surcharges apply):**

none

**3. Surcharge Pricing:**

none

**4. Special Testing Requirements:**

none

**5. Treatment and Handling Protocol:**

Treat water/Process Oil

**6. Treated Wastewater Discharge Subcategory:**☐ Subcategory A☒ Subcategory B☐ Subcategory C

**PROCESS FACILITY INFORMATION (CES USE ONLY!!)****7. Tests for Product Recovered/Recycled (if applicable):**

None

**8. Management for Product Recovered/Recycled (if applicable):**

black oil

2864

NDV Rig Solutions Spares and Service



4904 Griggs Road  
Houston TX 77021  
Tel. (713) 676-1460  
Fax. (713) 676-1460

## Waste Pre-Acceptance/Approval Letter

Date 7/3/2008

Dear Craig Taylor

Thank you for choosing CES Environmental Services, Inc. for your waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

**CES Profile #** 2864

**Expiration Date** 7/3/2010

**Generator:** NOV Rig Solutions Spares and Service

**Address:** 5100 N. Sam Houston Pkwy W.  
Houston, TX 77086

### Waste Information

**Name of Waste:** Oily rags and pads

**TCEQ Waste Code #:** Recycle

**Container Type:** cy box

**Detailed Description of Process Generating Waste:**

Oily rags and pads from oil spills

**Color:** varies

**Odor:** none

**pH:** na

**Physical State:**

**Incompatibilities:** none

**Safety Related Data/Special Handling:**

level d ppe

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President  
CES Environmental Services, Inc.



**CES Environmental  
Services, Inc.**

DB

4904 Griggs Road Houston, TX 77021  
Phone: (713) 676-1460 Fax: (713) 676-1676  
http://www.cesenvironmental.com  
TCEQ Industrial Solid Waste Permit No: 30948  
U.S. EPA ID No: TXD008950461 ISWR No: 30900

**SECTION 1: Material Producer Information**

Company: NOV Rig Solutions  
Address: 5100 North Sam Houston Parkway  
City, State, Zip: Houston, TX 77086  
Contact: Craig Taylor Title: Maintenance Manager  
Phone No: ~~281-369-0994~~ 281-569-3000 Fax No: ~~281-369-0994~~ 281-569-0980  
24/hr Phone: 832-309-9803  
U.S. EPA I.D. No: TXCESQG  
State I.D. CESQG SIC Code:

**SECTION 2: Billing Information – ☒ Same as Above**

Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Contact: \_\_\_\_\_ Title: \_\_\_\_\_  
Phone No: \_\_\_\_\_ Fax No: \_\_\_\_\_

**SECTION 3: General Description of the Material / Product**

Name of Material / Product: Oily Rags and Pads

Detailed Description of Process Generating or Producing the Material / Product: Oily rags and pads from oil spills

Physical State: ☐ Liquid ☐ Sludge ☐ Powder  
☒ Solid ☐ Filter Cake ☐ Combination

Color: Varies

Odor: None

Specific Gravity (water=1): 0.8 Density: 6 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☐ Truck ☒ Other (explain)  
Container Size: \_\_\_\_\_ cy box

Frequency: ☐ Weekly ☐ Monthly ☒ Quarterly ☐ Yearly  
Number of Units (containers): 1-4 Other: \_\_\_\_\_

Proper U.S. DOT Shipping Name: Recyclable Oily Rags and Pads

Class: Na UN/NA: Na PG: Na RQ: \_\_\_\_\_

Flash Point >200	pH Na	N/A	N/A	Solids 100%
Oil&Grease >100mg/l	TOC Namg/l	Zinc Namg/l	Copper Namg/l	Nickel Namg/l

**SECTION 4: Physical and Chemical Data**

<del>CONTAMINANT</del>	<del>CONCENTRATION</del>	<del>UNIT</del>
The material / product consists of the following materials	Ranges are acceptable	or %
Oil (Absorbed)	3-10	%
Rags	50-90	%
Pads	50-90	%
Booms	10-50	%

**SECTION 5: Safety Related Data**

If the handling of this material / product requires the use of special protective equipment, please explain.

Level A

**SECTION 6: Attached Supporting Documents**

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.

D PPE

**SECTION 7: Incompatibilities**

Please list all incompatibilities (if any):

None

**SECTION 8: Material Producer's Certification**

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Craig Taylor

Date: 7-2-08

Printed Name/Title: CRAIG TAYLOR

/ MAINTENANCE MANAGER

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Technical Manager: Robert Taylor

Date: 7-3-08

Approved

Rejected

Approval Number: 2864



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**1. Base Pricing (including freight):**

\$85/cy box  
Trans \$69/hr plus FSC

**2. Contamination Limits (maximum limit before surcharges apply):**

None

**3. Surcharge Pricing:**

None

**4. Special Testing Requirements:**

Make sure waste fits profile

**5. Treatment and Handling Protocol:**

Recycle to Recycler

**6. Treated Wastewater Discharge Subcategory:**

☐ Subcategory A

☐ Subcategory B

☐ Subcategory C



**PROCESS FACILITY INFORMATION (CES USE ONLY!!)**

**7. Tests for Product Recovered/Recycled (if applicable):**

Na
----

**8. Management for Product Recovered/Recycled (if applicable):**

Na
----

## CES Environmental Services, Inc.

4904 Griggs Rd.

Houston, TX 77021

Phone: (713) 676-1460

Fax: 713-748-8664

### Fax Transmittal

Total Number of Pages (Including cover sheet): \_\_\_\_\_

Date: 6/30/08

To: Craig Taylor  
281-569-0980

From: Dan Bowman  
CES Environmental Services, Inc.  
Mobile Phone: (713) 854-6150

#### Notes:

please review & sign profile. Fax  
back w/ drum counts. Morgan will call  
for plz time.

Dan